WAKULLA STATE FOREST
2017 LAND MANGEMENT PLAN

EXHIBITS

Exhibit A

Ten Year Management Accomplishment Summary

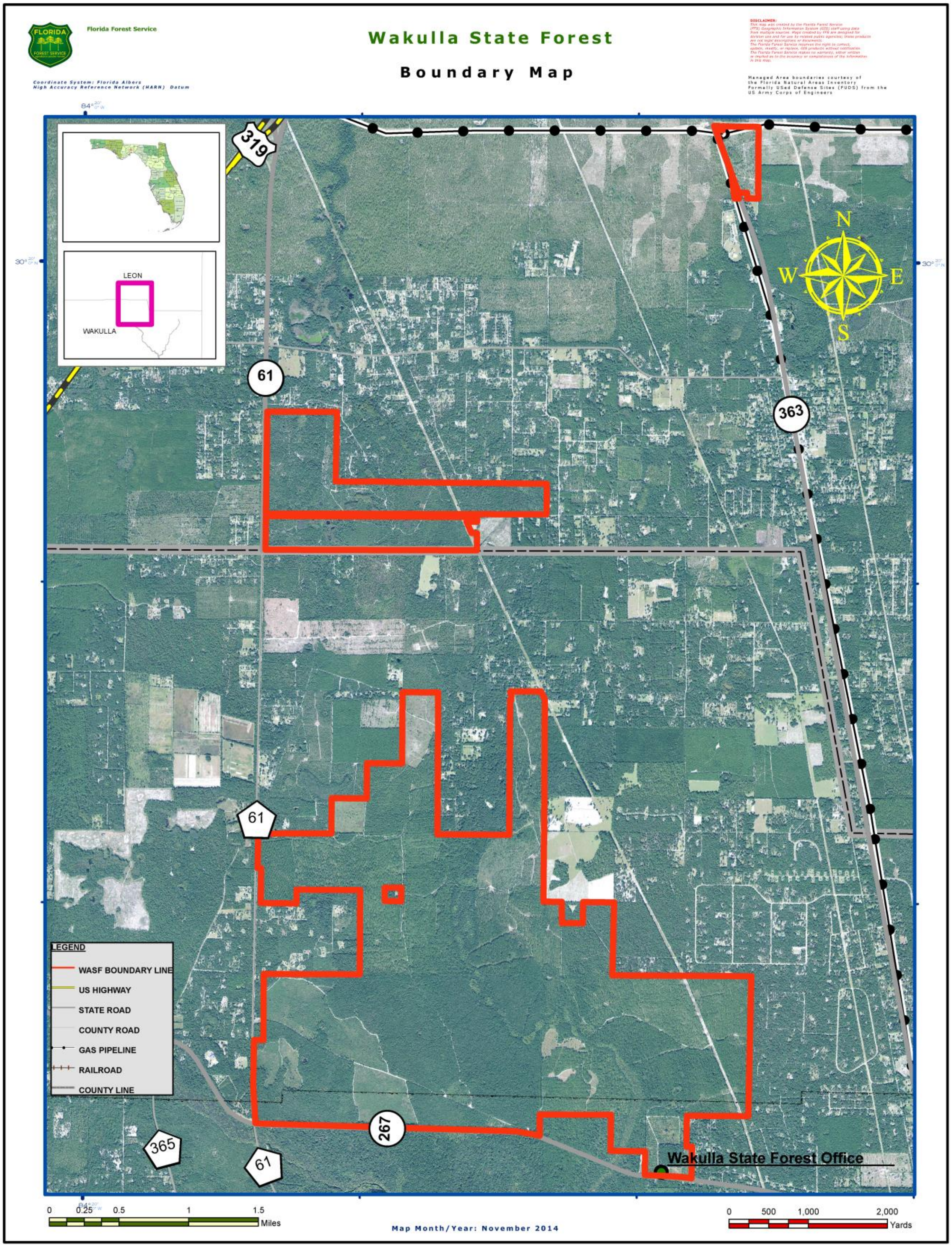
WAKULLA STATE FOREST 10-YEAR ACCOMPLISHMENT REPORT

Planting	Activities		2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	Total
Reforestation/	Longleaf Bareroot	No.				62,500							62,500
Restoration		Acres	124			111							235
(Indicate Species &	Containerized LL	No.		156,000	3,750				83,000				242,750
Bareroot (B) or		Acres		216	5				114				335
Containerized (C))	Hardwood	No.			3,000								3,000
		Acres			17								17
Seedling Survival Checks	Survival Checks	Acres		145	216	17	86			114			578
Timber Inventory	Inventory update	Acres						73	64	30			167
	New Inventory	Acres			1,732	944			161	1,078	679	660	5,254
	Plots	Plots					238					69	307
Site Preparation	Chop Single Pass	Acres							114				114
(Indicate treatment)	Herbicide	Acres	210	110								160	480
(pre-plant)	Burn	Acres						114					114
	Disk	Acres			17								17
	Mow	Acres	146										146
Exotic Species	Japanese Climbing Fern	Acres		2		2				1	5	2	12
Control (Indicate	Mimosia	Acres	6	3	45	7	2	1	1	1	40	2	108
Species & Method)	Chinaberry	Acres					3	20	2	1	40	10	76
Timber Sales	Marking DOF	Acres		269	291	107	172		179	180			1,198
Preperation for	Contractor	Acres											
next Fiscal Year	Sale Acreage to Cruise	Acres		317	752	20	172		179	180			1,620
Current Year Sales	Harvest	Acres	439	407	751	50	294	172			312	168	2,593
	Marking DOF	Acres					142				28		170
	Sale Acreage to Cruise	Acres					142				182		324
Recreation	Day Use	No.					10,905	40,218	42,113	53,025	31,450	36,300	214,011
	Split Rail Fence	Feet	400										400
	Limestone for Parking Lot	Loads	12										12
	Slash Rock on Side of Pavillion	Loads	0.50										1
	Gates	No.	7										7

Fire	Wildfire	No.	1										**1**
	Wildfire	Acres	0.20										**0.20**
	Prescribed Burning	Acres	183	712	1,687	428	848	699	2,150	674	1,039	1,442	**9,862**
Roads & Bridges	Roads Graded	Miles		5	31	21	23	25	20	11	20	32	**188**
	Roads Constructed	Miles		1									**1**
	Roads Rebuilt	Miles		1	1		1						**3**
	Roads Maintained	Miles	31.80										**31.80**
	Low W. Cross Installed	No.	1										**1**
	Culverts Installed	No.		2	1	1							**5**
Boundary Maint.	Maintenance/Marking	Miles	21	18	24	16	12	10	13	11	18	22	**165**
	Programs/Tours	No.	2	2	1	1							**6**
I&E Activities	Radio - TV - Articles	No.			1								**1**
Other Activities	Signs Installed	No.	2										**2**
	Mowing for New Office	Acres	1										**1**
	Food Plot -Harrowing	Acres			33								**33**
	Food Plot Planted	Acres			18								**18**
	Trail Maintenance	Miles						12	9	5	26	24	**76**

Exhibit B

Boundary Maps


Florida Forest Service
Wakulla State Forest
Boundary Map
DISCLAIMER:
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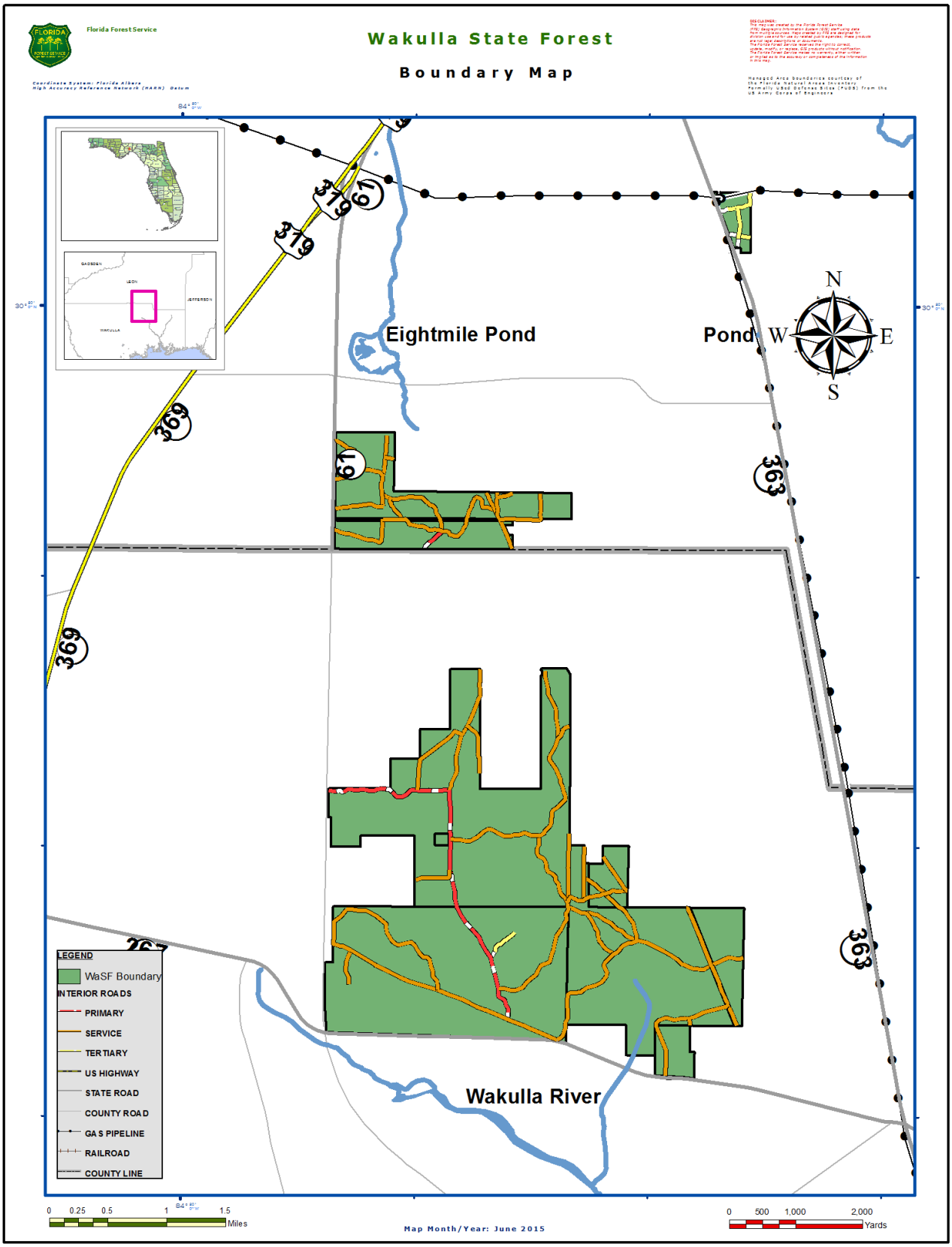
Managed Area boundaries courtesy of
the Florida Natural Areas Inventory
Formally USed Defense Sites (FUDS) from the
US Army Corps of Engineers
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEON
WAKULLA
319
61
363
N
S
E
W
LEGEND
WASF BOUNDARY LINE
US HIGHWAY
STATE ROAD
COUNTY ROAD
GAS PIPELINE
RAILROAD
COUNTY LINE
267
365
Wakulla State Forest Office
0 0.25 0.5 1 1.5
Miles
0 500 1,000 2,000
Yards
Map Month/Year: November 2014


Florida Forest Service
Wakulla State Forest
Boundary Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
DISCLAIMER:
Homegold Area Boundaries courtesy of
the Florida Natural Areas Inventory
Formally Used Defense Sites (FUDS) from the
US Army Corps of Engineers
Eightmile Pond
Pond
Wakulla River
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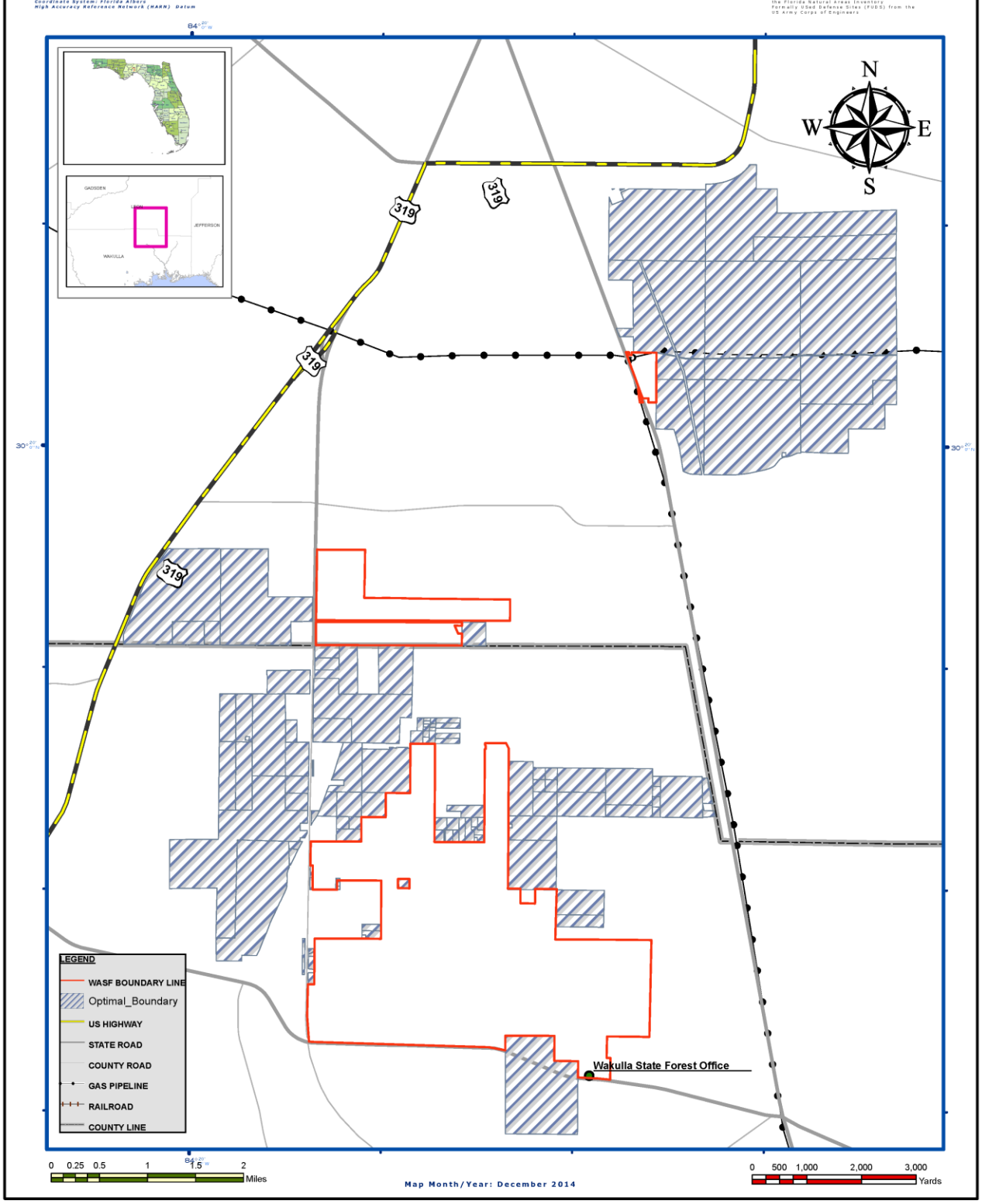
E
S
319
369
363
LEGEND
WaSF Boundary
INTERIOR ROADS
PRIMARY
SERVICE
TERTIARY
US HIGHWAY
STATE ROAD
COUNTY ROAD
GAS PIPELINE
RAILROAD
COUNTY LINE
0 0.25 0.5 1 1.5
Miles
0 500 1,000 2,000
Yards
Map Month/Year: June 2015

Exhibit C

Optimum Management Boundary Map


Florida Forest Service
Wakulla State Forest
Optimal Management Boundary
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
DISCLAIMER:
Managed Area boundaries courtesy of the Florida Natural Areas Inventory
Formally Used Defense Sites (FUDS) from the US Army Corps of Engineers
N
W
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319
GADSDEN
LEON
JEFFERSON
WAKULLA
LEGEND
WASF BOUNDARY LINE
Optimal_Boundary
US HIGHWAY
STATE ROAD
COUNTY ROAD
GAS PIPELINE
RAILROAD
COUNTY LINE
Wakulla State Forest Office
0 0.25 0.5 1 1.5 2
Miles
0 500 1,000 2,000 3,000
Yards
Map Month/Year: December 2014

Exhibit D

Road Map

Florida Forest Service

Wakulla State Forest

Road Map

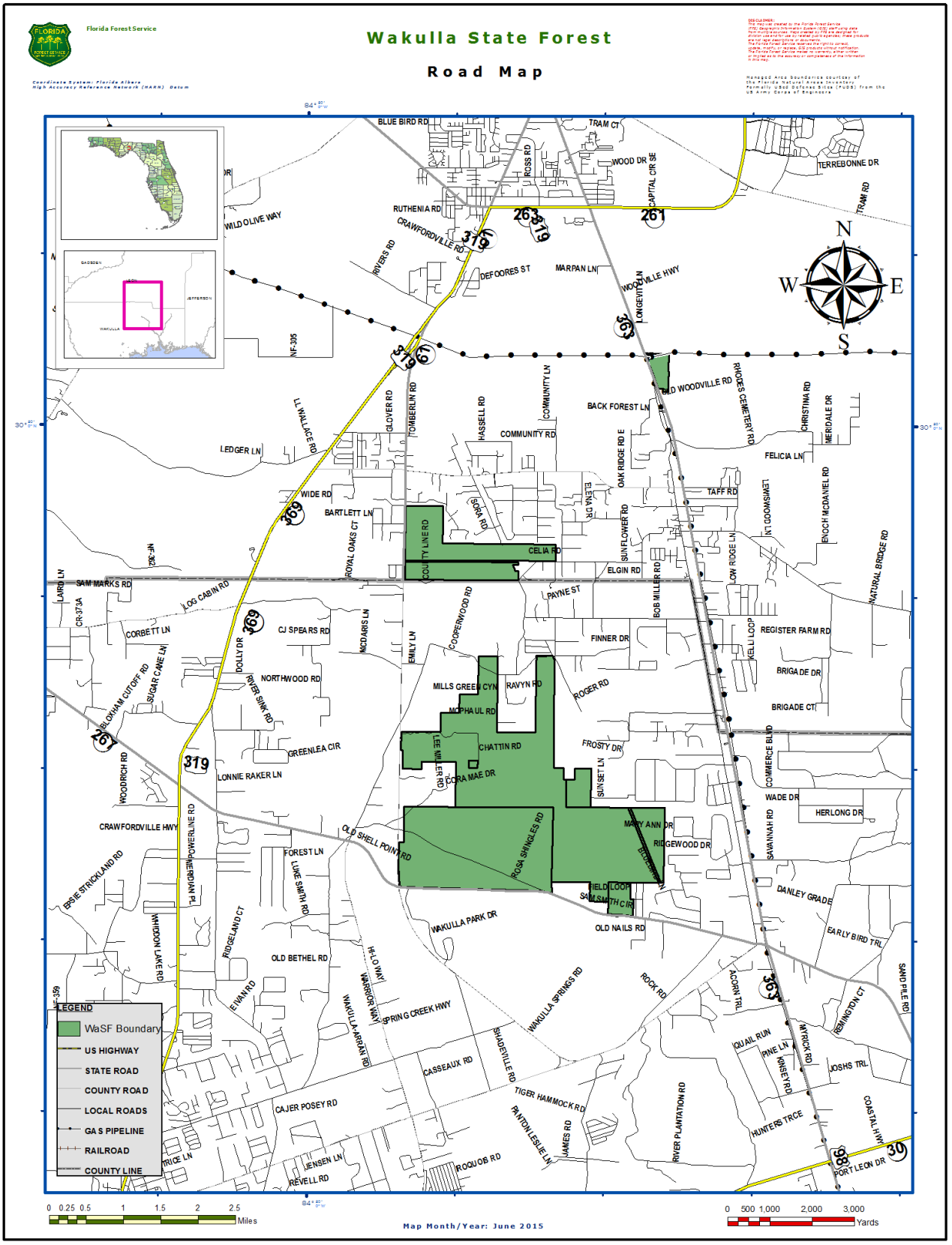

Exhibit E

Facilities, Recreation, and Improvements

Florida Forest Service

Wakulla State Forest

Facilities, Recreation, & Improvements

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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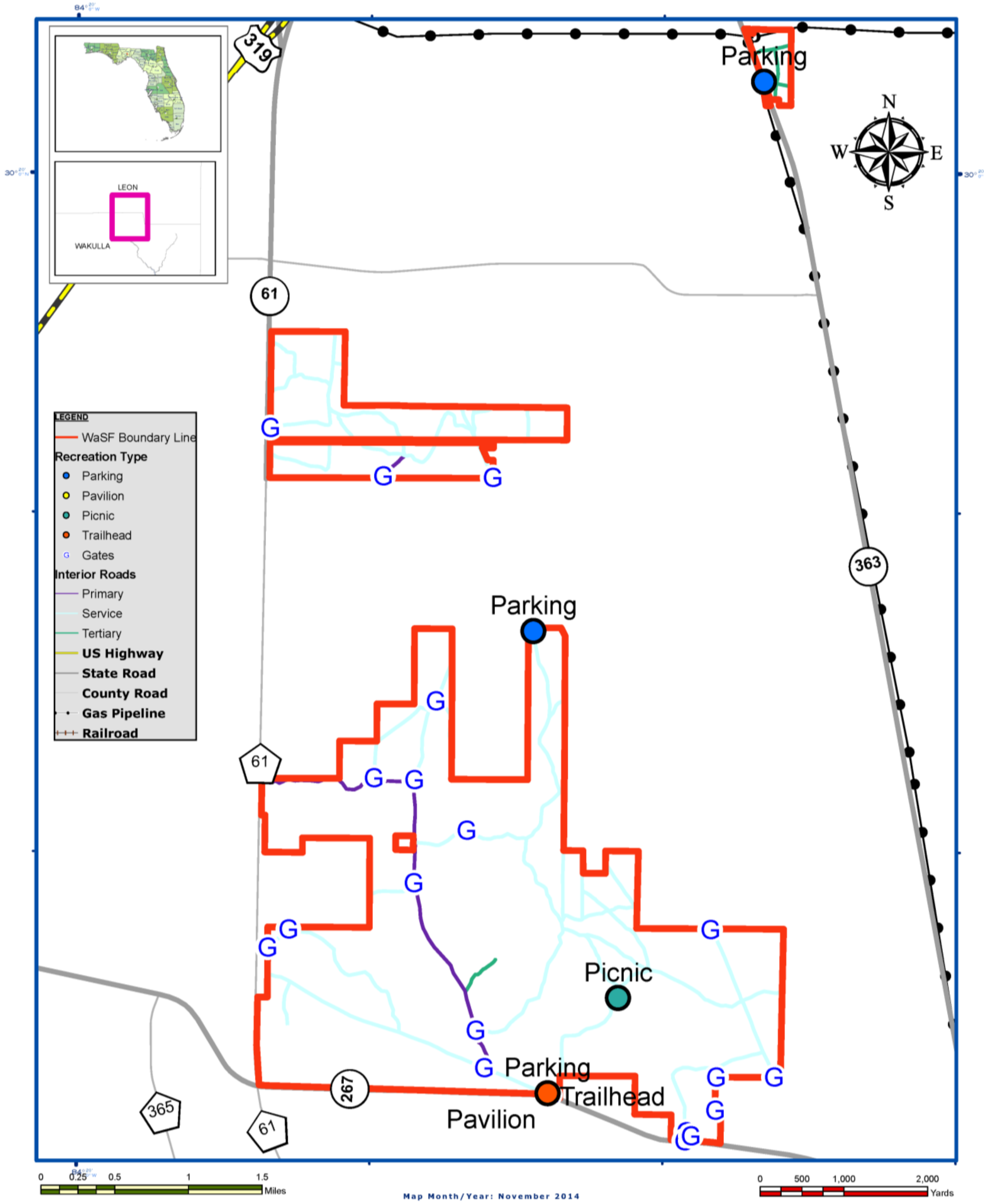
Managed Area boundaries courtesy of the Florida Natural Areas Inventory
Formally USed Defense Sites (FUDS) from the US Army Corps of Engineers



Map Month/Year: November 2014

Exhibit F

Tract & Acreage Maps

Florida Forest Service

Wakulla State Forest

Wakulla Tract

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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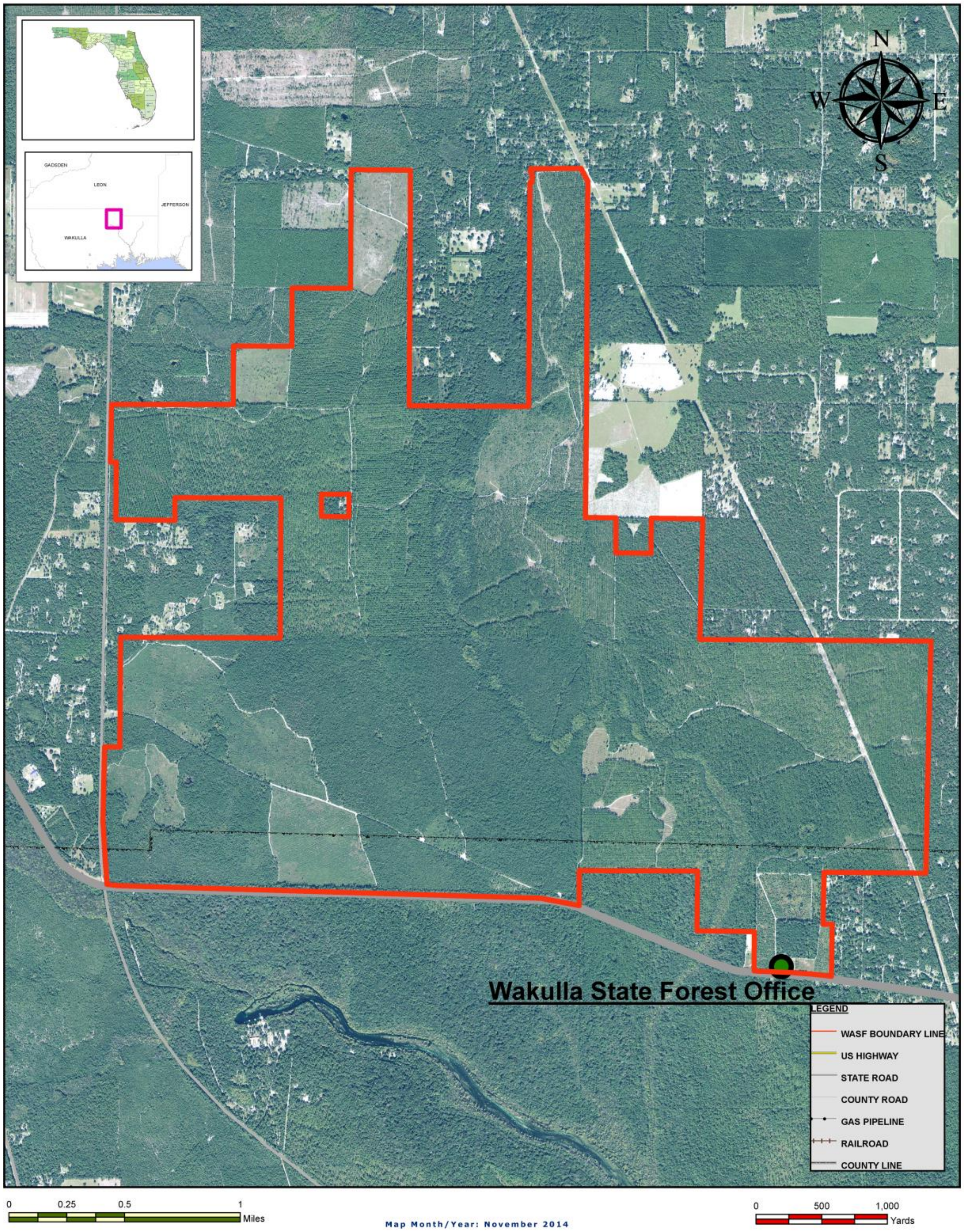
Managed Area boundaries courtesy of
the Florida Natural Areas Inventory
Formally USed Defense Sites (FUDS) from the
US Army Corps of Engineers



Map Month/Year: November 2014

Florida Forest Service

Wakulla State Forest

Eight Mile Tract - 678.57 Acres

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
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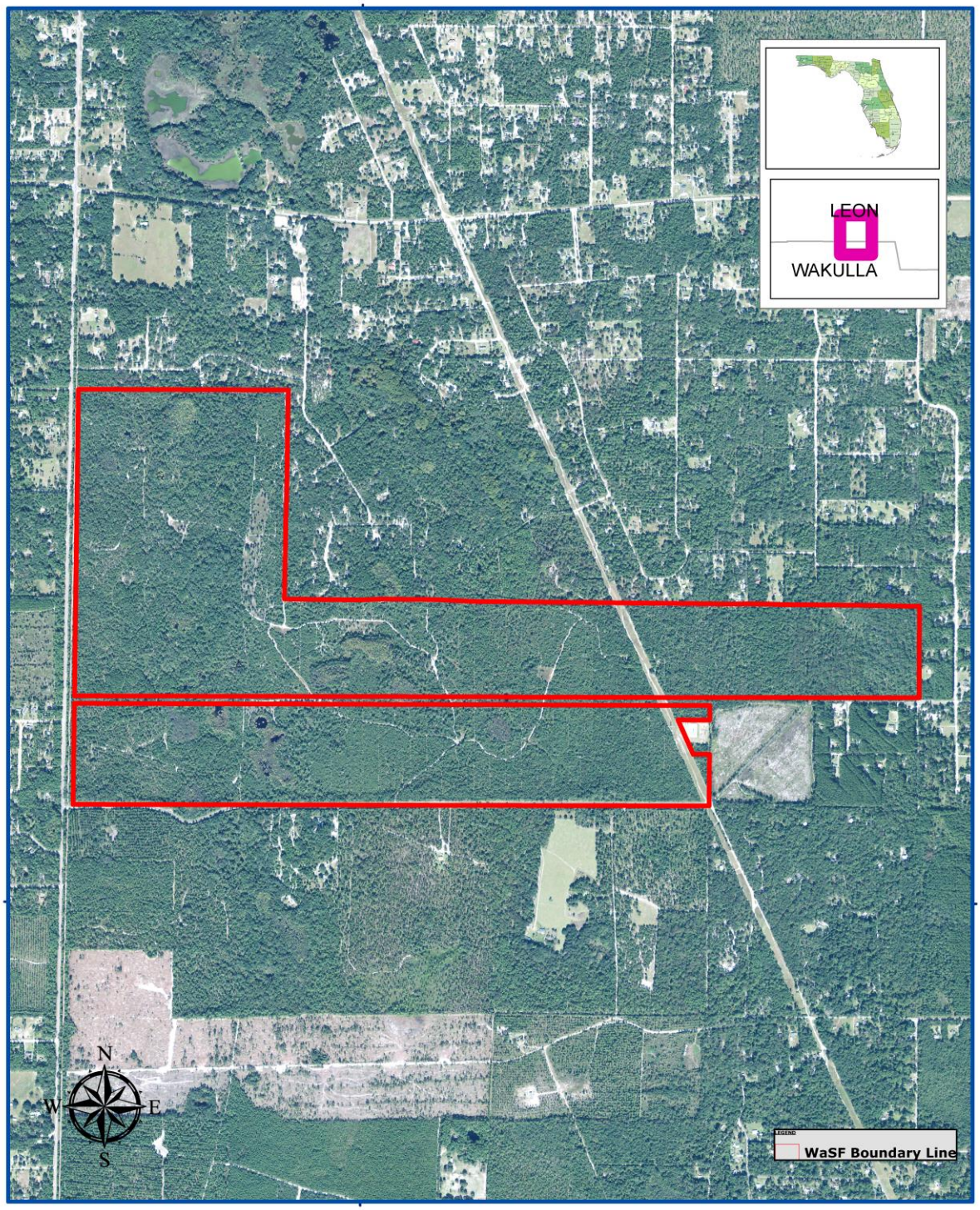
Managed Area boundaries courtesy of the Florida Natural Areas Inventory
Formally USAid Defense Sites (FUDS) from the US Army Corps of Engineers



0 0.25 0.5 Miles

Map Month/Year: July 2014

Florida Forest Service

Wakulla State Forest

Woodville Tract - 73.30 Acres

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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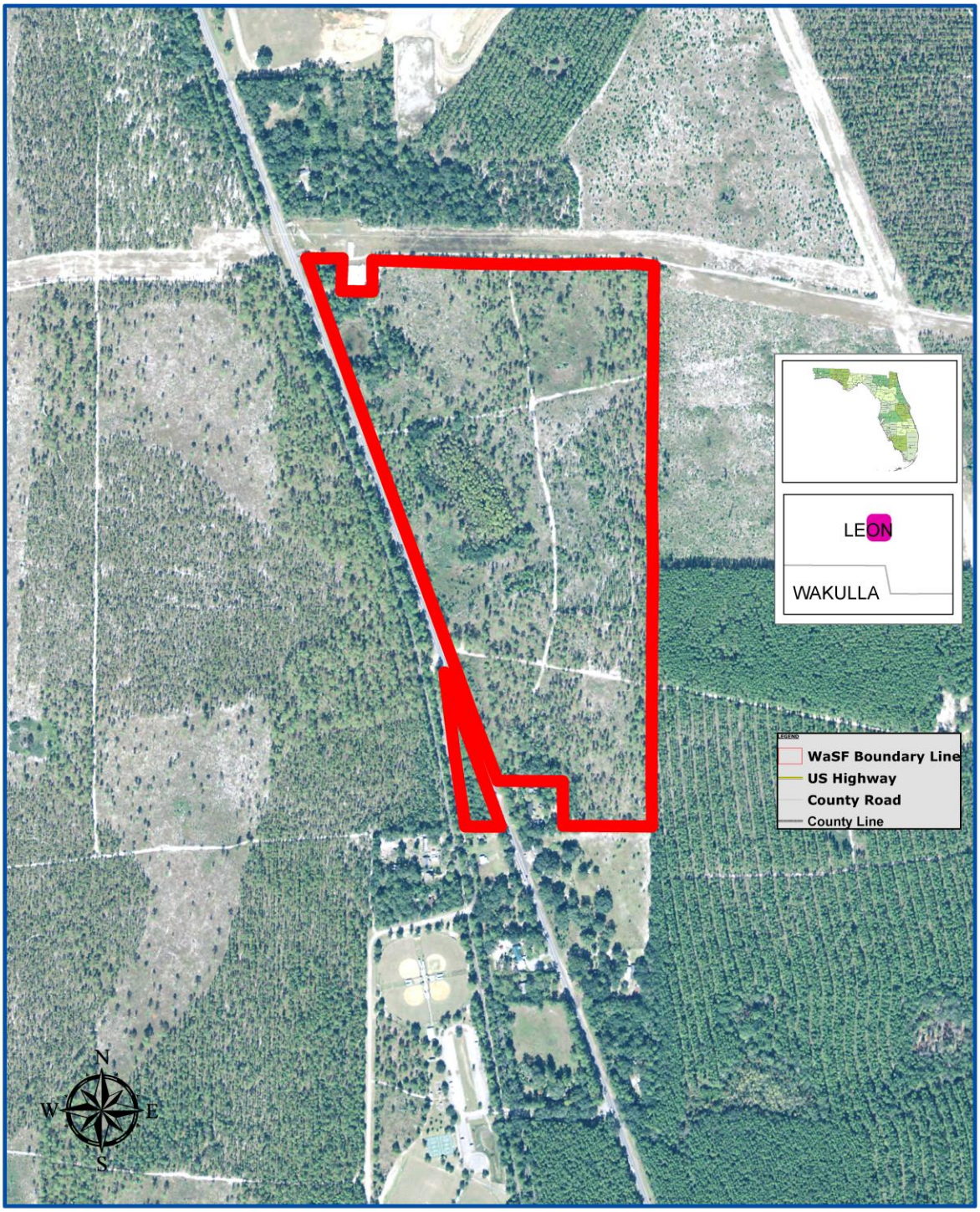
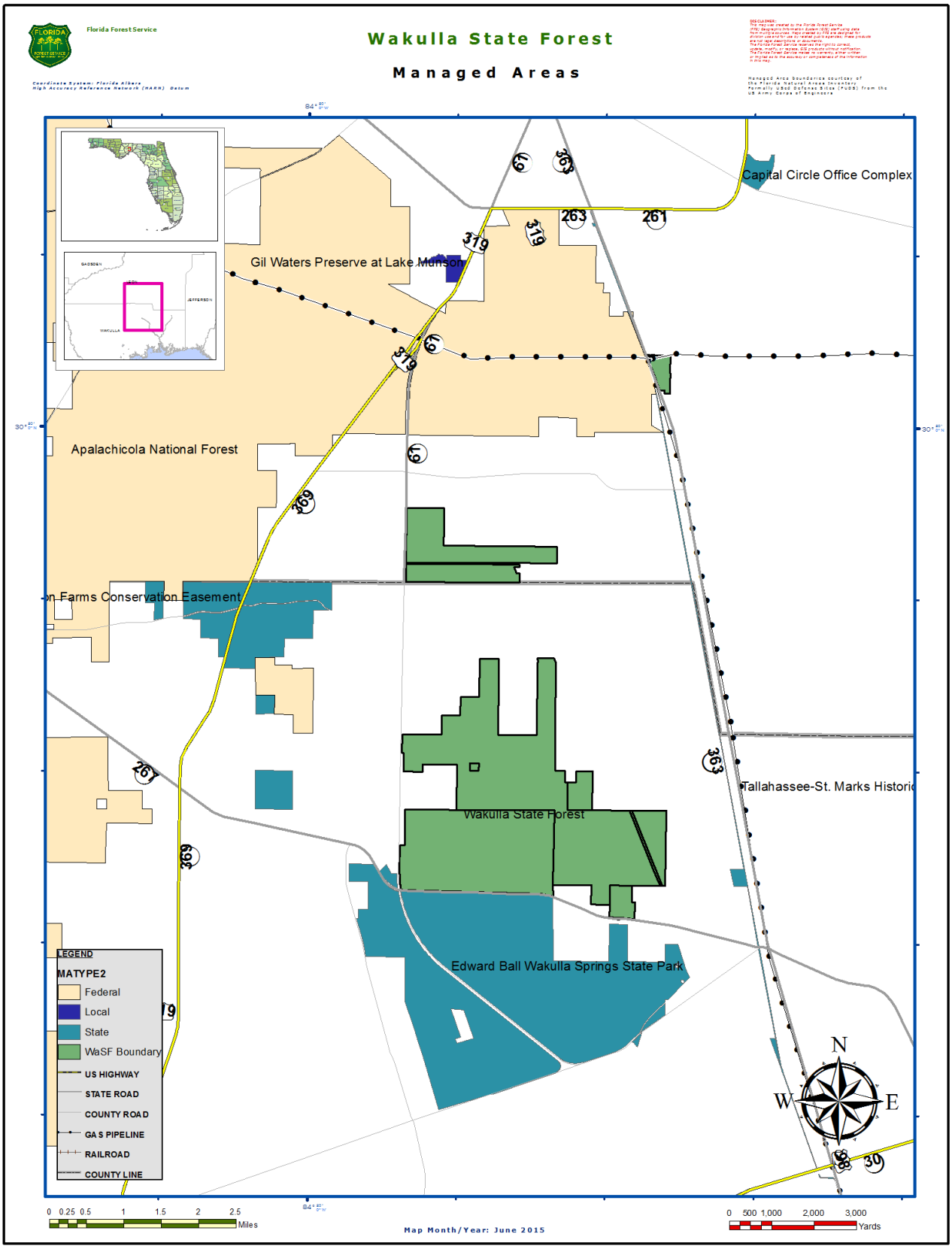
Managed Area boundaries courtesy of the Florida Natural Areas Inventory
Formally USed Defense Sites (FUDS) from the US Army Corps of Engineers



Map Month/Year: July 2014

Exhibit G

Proximity to Significant Managed Lands


Florida Forest Service
Wakulla State Forest
Managed Areas
Capital Circle Office Complex
Gil Waters Preserve at Lake Munson
Apalachicola National Forest
Farms Conservation Easement
Wakulla State Forest
Tallahassee-St. Marks Historic
Edward Ball Wakulla Springs State Park
LEGEND
MATYPE2
Federal
Local
State
WaSF Boundary
US HIGHWAY
STATE ROAD
COUNTY ROAD
GAS PIPELINE
RAILROAD
COUNTY LINE
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Miles
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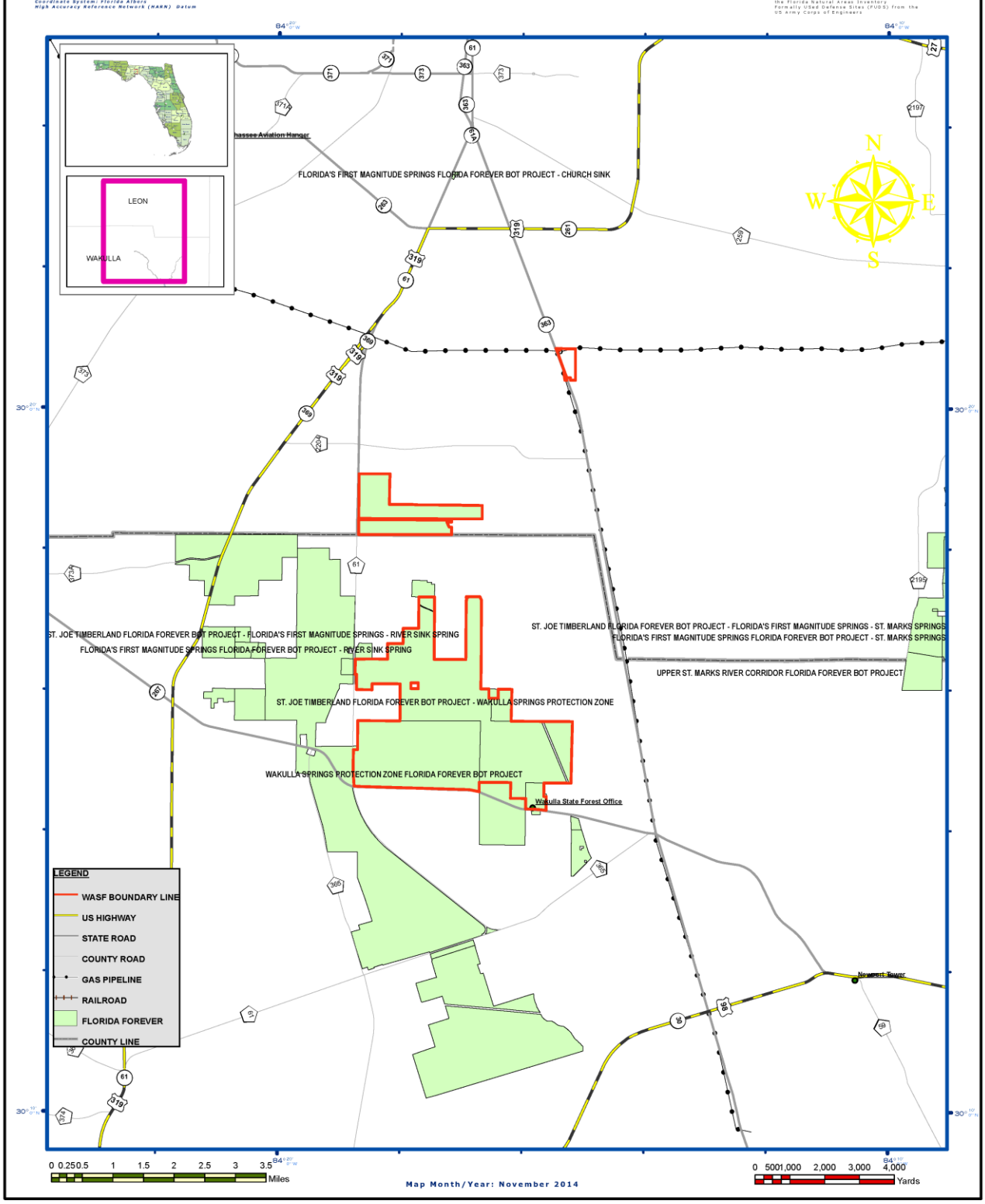
Yards
Map Month/Year: June 2015

Exhibit H

Florida Forever Projects


Florida Forest Service
Wakulla State Forest
Florida Forever Projects
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
DISCLAIMER:
Managed Area boundaries courtesy of the Florida Natural Areas Inventory Formally Used Defense Sites (FUDS) from the US Army Corps of Engineers
LEON
WAKULLA
FLORIDA'S FIRST MAGNITUDE SPRINGS FLORIDA FOREVER BOT PROJECT - CHURCH SINK
ST. JOE TIMBERLAND FLORIDA FOREVER BOT PROJECT - FLORIDA'S FIRST MAGNITUDE SPRINGS - RIVER SINK SPRING
FLORIDA'S FIRST MAGNITUDE SPRINGS FLORIDA FOREVER BOT PROJECT - RIVER SINK SPRING
ST. JOE TIMBERLAND FLORIDA FOREVER BOT PROJECT - FLORIDA'S FIRST MAGNITUDE SPRINGS - ST. MARKS SPRINGS
FLORIDA'S FIRST MAGNITUDE SPRINGS FLORIDA FOREVER BOT PROJECT - ST. MARKS SPRINGS
UPPER ST. MARKS RIVER CORRIDOR FLORIDA FOREVER BOT PROJECT
ST. JOE TIMBERLAND FLORIDA FOREVER BOT PROJECT - WAKULLA SPRINGS PROTECTION ZONE
WAKULLA SPRINGS PROTECTION ZONE FLORIDA FOREVER BOT PROJECT
Wakulla State Forest Office
Newport Tower
LEGEND
WASF BOUNDARY LINE
US HIGHWAY
STATE ROAD
COUNTY ROAD
GAS PIPELINE
RAILROAD
FLORIDA FOREVER
COUNTY LINE
0 0.250.5 1 1.5 2 2.5 3 3.5 Miles
0 5001,000 2,000 3,000 4,000 Yards
Map Month/Year: November 2014

St. Joe Timberland

Bay, Walton Washington, Gadsden, Liberty, Gulf, Franklin, Wakulla, Leon, Jefferson and Taylor Counties

Climate Change Lands

Purpose for State Acquisition
The St. Joe Company is one of the largest landowners in Florida. The St. Joe Timberland project will consolidate the St. Joe ownerships already included in other projects, thus helping to preserve large undeveloped tracts of land for native plants and animals and giving the public an opportunity to experience large natural areas throughout north Florida. This project may also help complete the Florida National Scenic Trail, a statewide non-motorized trail that crosses a number of Florida Forever project sites.

Manager
The sites will be managed by various agencies. See the summaries for the projects listed below.

General Description
The St. Joe Timberlands project includes the St. Joe Company ownerships in the following projects: Apalachicola River (Sweetwater Creek 7,040 acres, Gadsden Glades 360 acres, and Aspalaga Landing 600 acres sites); Brevard Coastal Scrub Ecosystem (Tico site 1,780 acres); Dickerson Bay/Bald Point (Bald Point site 3,840 acres); Florida's First Magnitude Springs (River Sink 40 acres and St. Marks 700 acres springs sites); Lake Powell 600 acres; St. Joseph Bay Buffer 250 acres; Sand Mountain 1,680 acres; Tates Hell/Carrabelle Tract 16,000 acres; Wacissa/Aucilla River Sinks 19,840 acres; and Wakulla Springs Protection Zone 2,240 acres. The sites lie in the Panhandle from Bay and Washington Counties to Taylor County, except for the Tico site in Brevard County. They include samples of almost all the natural communities of north and central Florida, from scrub to swamps and springs. See the general descriptions for the projects listed above.

St. Joe Timberland FNAI Elements	
Florida Torreya	G1/S1
Florida Black Bear	G5T2/S2
Gopher Tortoise	G3/S3
Swallow-tailed Kite	G5/S2
Apalachicola Rosemary	G1/S1
Chapman's Rhododendron	G1/S1
Godfrey's Blazing Star	G1/S1
Quillwort Yellow-eyed Grass	G1/S1
Telephus Spurge	G1/S1
Curtiss' Loosestrife	G1/S1
Big Blue Spring Cave Crayfish	G1/S1
Woodville Karst Cave Crayfish	G1/S1
87 rare species are associated with the project	

Public Use
The sites are designated for various public uses. See the summaries for the projects listed above.

Acquisition Planning
On 12/9/1999, the Land Acquisition Management Advisory Council (LAMAC) approved the creation of the St. Joe Timberland project and added it to the Conservation and Recreation Lands (CARL) Priority list. The project was sponsored by the St. Joe Company, Division of State Lands (DSL), and The Nature Conservancy (TNC), and initially consisted of individual tracts owned by St. Joe Company within existing projects. Other sites will be proposed for addition to the project. Approval was given to add an additional 1,318 acres (18 to the Wacissa/Aucilla River Sinks project and approximately 1,300 to the Apalachicola River Project – Lake Wimico site) to the project boundary as essential parcels. The initial project consisted of approximately 56,218 acres and a Tax Assessed Value of $34,614,545. The Northwest Florida Water Management District (NWFWMD) has acquired the majority of the Sand Mountain site.

Placed on List	2000
Project Area (GIS Acres)	170,571
Acres Acquired (GIS)	80,595*
at a Cost of	$76,054,595
Acres Remaining (GIS)	89,976
with Estimated (Tax Assessed) Value of	$48,576,562

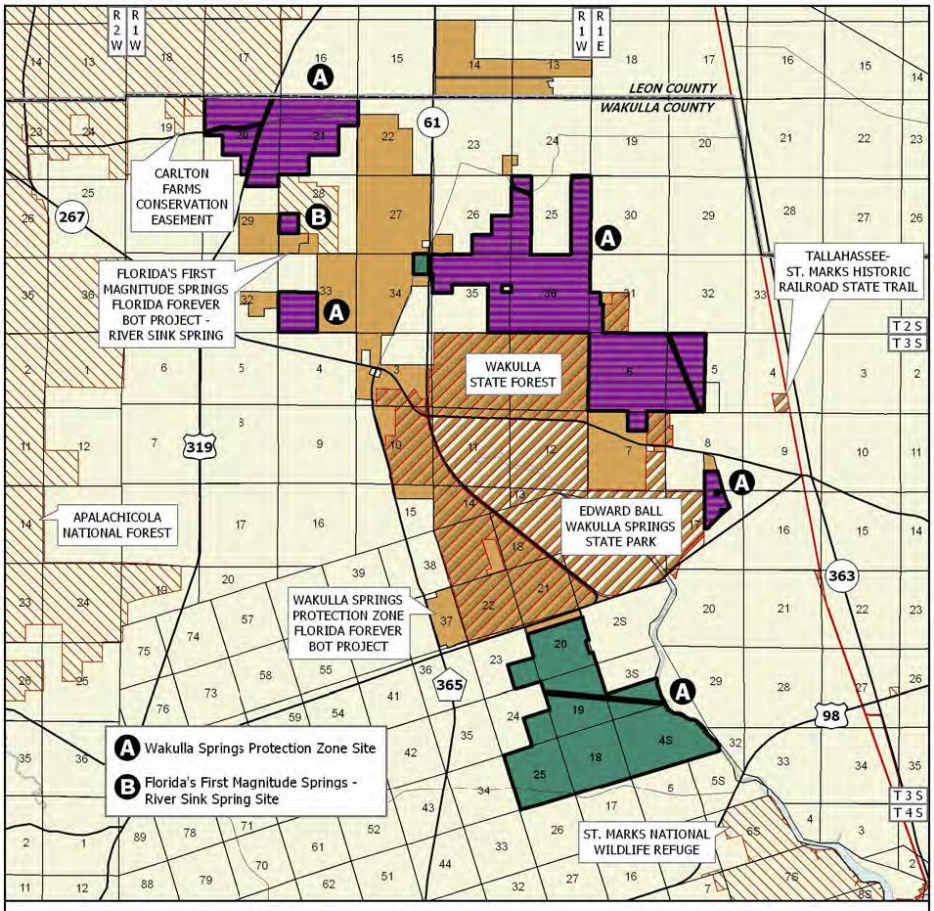
*NWFWMD has purchased acreage in project boundary.

ST. JOE TIMBERLAND: OVERVIEW

BAY, WALTON, WASHINGTON, GADSDEN, LIBERTY, GULF, FRANKLIN, WAKULLA, LEON, JEFFERSON, AND TAYLOR COUNTIES

Map 1
A. Lake Powell Site
Map 2
A. Sand Mountain Site
Map 3
A. Apalachicola River - Gadsden Glades Site
B. Apalachicola River - Aspalaga Landing Site
C. Apalachicola River - Crooked/Short Creek Site
D. Apalachicola River - Sweetwater Creek Site
Map 4
A. St. Joseph Bay Buffer Site
B. St. Vincent Sound-to-Lake Wimico Ecosystem Site
C. Lake Wimico Site
Map 5
A. Tates Hell/Carrabelle Site
Map 6
A. Dickerson Bay/Bald Point Site
Map 7
A. Wakulla Springs Protection Zone Site
B. Florida's First Magnitude Springs - River Sink Spring Site
Map 8
A. Florida's First Magnitude Springs - St. Marks Springs Site
Map 9
A. Wacissa/Aucilla River Sinks Site

MAY 2006



ST. JOE TIMBERLAND: MAP 7 OF 9

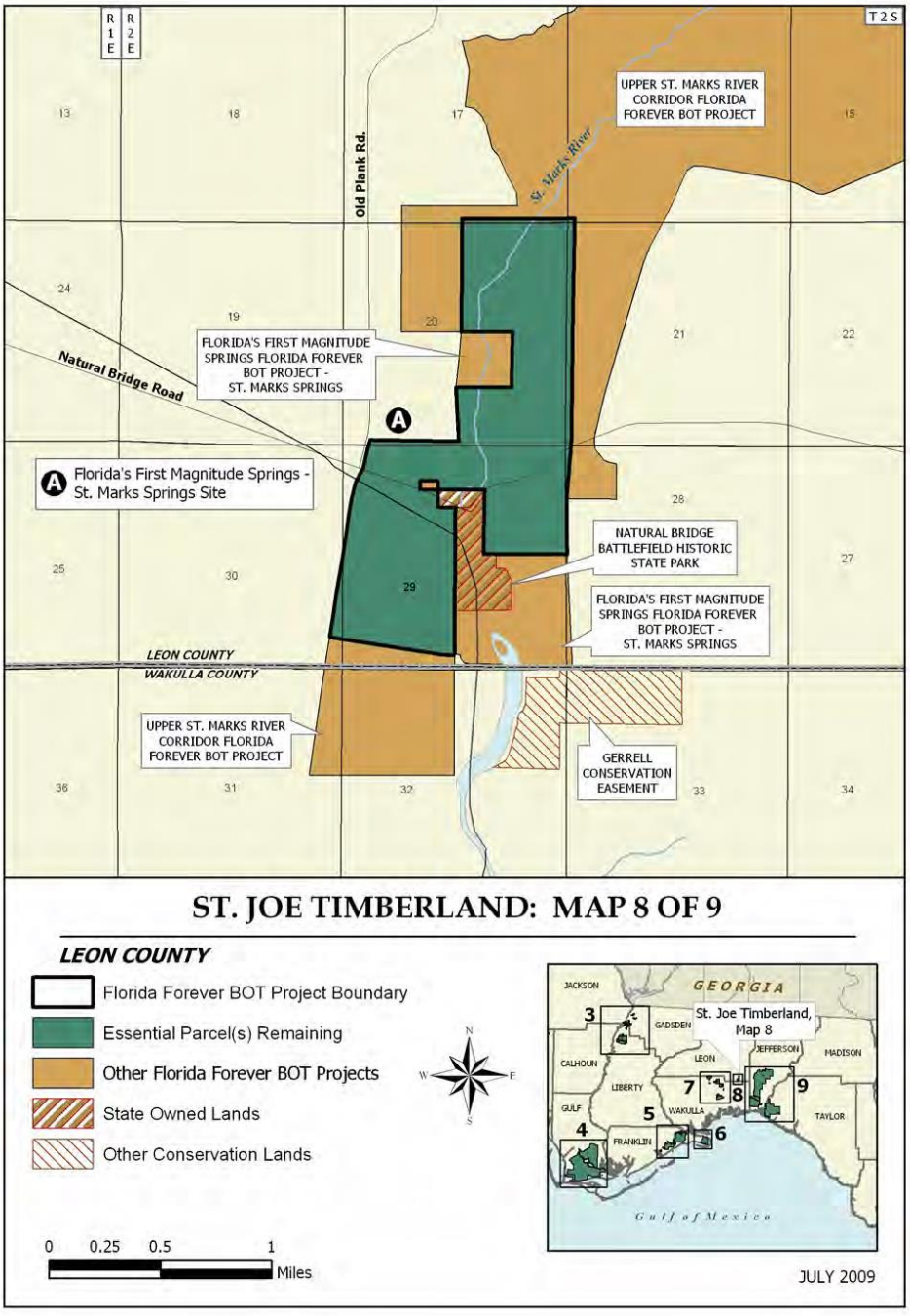
WAKULLA COUNTY

- Florida Forever BOT Project Boundaries
- Acquired
- Essential Parcel(s) Remaining
- Other Florida Forever BOT Projects
- State Owned Lands
- Other Conservation Lands

0 0.5 1 2 Miles

JANUARY 2008

St. Joe Timberland



St. Joe Timberland

On 8/22/2000, the Acquisition and Restoration Council (ARC) approved a fee-simple, 12,360-acre addition, known as Lake Wimico site, to the project boundary. It was sponsored by the Florida Fish and Wildlife Conservation Commission (FWCC), consisted of one owner, the St. Joe Company, and a 1999 taxable value of $1,118,790. On 8/22/2000, the ARC approved a fee-simple, 1,592-acre addition, known as Snipe Island, to the project boundary. It was sponsored by the TNC, consisted of one owner, the St. Joe Company, and a 1999 taxable value of $1,940,906. The FWCC proposed 12,360-acre addition which was approved to be added to the Lake Wimico site.

On 7/12/2001, the ARC approved a fee-simple, 22,260-acre addition, to the project boundary. It was sponsored by the FWCC, consisted of one owner, the St. Joe Company, and a 2000 taxable value of $5,565,000. 19,445 acres are located in Jefferson County, the remainder in Taylor County. On 7/12/2001, the ARC approved a fee-simple, 2,560-acre addition, to the St. Joseph Bay buffers project boundary. It was sponsored by the FWC, consisted of one owner, the St. Joe Company, and a 2000 taxable value of $210,880. The property is located in Gulf County.

On 4/25/2002, the ARC approved a fee-simple, 2,194-acre addition, known as the Tiger Hammock Conservation Area, to the project boundary. It was sponsored by Dr. John Epler, consisted of one owner, the St. Joe Company, and a 2002 taxable value of $1,243,672.
On 4/25/2002, the ARC approved a fee-simple, 1,656-acre addition, known as Crooked Creek (1,365 acres, Gadsden/Liberty Counties) and Short Creek (291 acres, Liberty County), to the project boundary. It was sponsored by the TNC, consisted of one owner, the St. Joe Company, and a 2001 taxable value of $241,410.

On 6/6/2003, the ARC approved a fee-simple, 49,565-acre addition, known as St. Vincent Sound to Lake Wimico, to the project boundary. It was sponsored by the TNC, consisted of one owner, the St. Joe Company, and a 2002 taxable value of $3,213,760.

On 6/4/2004, the ARC approved a fee-simple, 10,444-acre addition, known as the Flint Rock tract, to the project boundary. It was sponsored by the TNC, consisted of one owner, the St. Joe Company, and a 2002 taxable value of $1,007,366.

In 1/2008 TNC acquired 10,905 acres known as Flint Rock.

On 4/6/2010, the FWCC acquired from TNC approximately 2,836 acres of the Flint Rock site for $5,246,371.

Coordination
TNC is an acquisition intermediary for this project.

Updated 2/17/2012

Wakulla Springs Protection Zone

Wakulla and Leon Counties

Partnerships

Purpose for State Acquisition
Just south of Tallahassee, Wakulla Springs - one of the largest and deepest artesian springs in the world - is now protected by a state park, but the enormous caverns that feed the spring spread far to the north and west of the park. The Wakulla Springs Protection Zone will protect the spring by protecting the land above the conduits that feed it, connect the state park with the Apalachicola National Forest, and provide the public an area for camping, hiking, and hunting.

Managers
Division of Recreation and Parks (DRP), Florida Department of Environmental Protection (FDEP); Florida Forest Service/FFS (aka Division of Forestry/DOF), Department of Agriculture and Consumer Services; and the Fish and Wildlife Conservation Commission (FWCC). See Management Prospectus for areas of management.

General Description
Over 70 percent of the project is in intensive silviculture or pasture, remnant natural areas include floodplain swamps and forests, upland pine or upland mixed forests, and unique features like sinkholes, aquatic caves, and spring-run streams. The project is important to protecting the subterranean headwaters of Wakulla Springs, the state's largest first magnitude spring and source of the Wakulla River. It is one of the largest and deepest artesian springs in the world and an Outstanding Florida Water. At least five rare animals, including three crustaceans in the aquatic caves, have been found here. Eight archaeological sites, including four mounds, are known from the site, and more can be expected. There is also a historic cemetery in the project. The sinkholes in the project are vulnerable to trash dumping and development, which may degrade the quality of water flowing into Wakulla Spring; endangerment of the area is moderate.

Wakulla Springs Protection Zone
FNAI Elements

Florida Black Bear	G5T2/S2
Gopher Tortoise	G3/S3
Woodville Karst Cave Crayfish	G1/S1
Florida Cave Amphipod	G2G3/S2S3
Hobbs' Cave Amphipod	G2G3/S2S3
Suwannee Cooter	G5T3/S3
Florida Pine Snake	G4T3/S3
Southeastern Fox Squirrel	G5T5/S3

9 rare species are associated with the project.

Public Use
Portions of the project qualify as state park, state forest, and wildlife management area. Hiking or bicycling trails could link the park with the Apalachicola National Forest, and the project could also be suitable for camping, horseback riding, and perhaps hunting.

Acquisition Planning
On 12/5/1996 the Land Acquisition Advisory Council (LAAC) added the Wakulla Springs Protection Zone project to the 1997 CARL priority list. This fee-simple acquisition, sponsored by the DRP, consisted of approximately 10,243 acres, multiple owners and a 1995 taxable value of $7,151,888.

The essential parcels are the Ferrell tract, McBrides Slough tract and smaller tracts between the Edward Ball—Wakulla Springs State Park and Ferrell Tract. The McBrides Slough tract has been mapped previously as a DRP Inholdings and Additions project.

On 10/15/1998, the LAMAC revised the designation of the following area to essential: approximately 1,004 acres that would connect the Ferrell tract with the Apalachicola National Forest.

Placed on List	**1997**
Project Area (GIS Acres)	**7,421**
Acres Acquired (GIS)	**3,452**
at a Cost of	**$7,372,678**
Acres Remaining (GIS)	**3,969**
with Estimated (Tax Assessed) Value of	**$7,372,678**

Wakulla Springs Protection Zone

In 12/1999 the St. Joe Timberland FF project was created. Approximately 3,702 acres were transferred from this project into the St. Joe project.

On 10/25/2001 the Acquisition and Restoration Council (ARC) approved a fee-simple 59-acre addition to the project boundaries. The addition, sponsored by the Office of Environmental Services (OES), consisted of multiple owners and a 2001 taxable value of $146,181. The Stansbury Sink is located within this addition.

On 6/9/2006, the ARC approved a fee-simple, 152-acre addition to the project boundary. It was sponsored by the FDEP, Florida Springs Initiative, consisted of seven owners, and a 2005 taxable value of $94,268. One owner, Linderand, Inc., already holds title to property within the current project boundary. These parcels were designated as essential since they are important to the future water quality of Wakulla Springs. FDEP is recommended manager of the addition.

On 12/14/2007 the ARC approved a fee-simple 700-acre one-parcel addition, known as Chason Woods, to the project boundary. It was sponsored by Jerry Parrish Realty and owned by one landowner, with a taxable value of $1,392,980. The FFS agreed to manage the parcel. Originally this parcel was not identified as essential, and required matching funds for acquisition.

On 12/12/2008 ARC approved a request to identify the Chason Woods parcel as an essential parcel.

Coordination

The Nature Conservancy (TNC), DRP, the Trust for Public Lands (TPL) are acquisition partners for this project.

Management Policy Statement

The primary objective of management of the Wakulla Springs Protection Zone project is to preserve the water quality of Wakulla Springs by protecting the land above the underground conduits that supply the spring. Achieving this objective will provide a refuge for extremely rare cave-dwelling crustaceans, preserve wildlife habitat in this developing region, and provide various recreational opportunities, such as camping and hiking, to the public.

Management activities should be directed toward the protection of surface-water and groundwater quality. Managers should control public access to the project; limit public motor vehicles to one or a few major roads and route them away from sinkholes; thoroughly inventory the resources; and monitor management activities to ensure that they are actually preserving the quality of the groundwater. Managers should limit the number and size of recreational facilities, such as hiking trails, ensure that they avoid the most sensitive resources, particularly sinkholes and spring runs, and site them in already disturbed areas when possible.

If less than fee purchases are made within the project, any activities, such as silviculture, road improvements, or any development, should be strictly monitored to ensure that surface-water and groundwater quality in the project area is maintained or improved.

For areas managed by FFS, the primary land management goal is to restore, maintain and protect in perpetuity all native ecosystems; to integrate compatible human use, and to insure long-term viability of populations and species considered rare. This ecosystem approach will guide the FFS's management activities on this project.

For areas managed by FWCC, priority will be given to the conservation and protection of environmentally unique native habitats and threatened and endangered species. Under FWCC management, the tract will also provide opportunities for hunting, fishing, wildlife observation, hiking, and other natural resource-based recreational activities.

Management Prospectus

Qualifications for state designation Its unique subterranean resources connected with Wakulla Springs, one of Florida's most significant artesian springs and already managed as a state park, qualify this project as a unit of the state park system. The project's size and diversity of resources makes portions of it also desirable for use and management as a state forest and a wildlife management area. Management by the FFS as a state forest is contingent upon the state acquiring fee-simple title to the core parcels.

Manager The DRP will manage areas south of State Road 267 and west of State Road 61, except for that portion of the Ferrell property in sections 22 and 27, T2S, R1W, consisting of approximately 120 acres of agricultural fields and the 152-acre boundary addition. The FWC is recommended as lead manager for the 120-acre portion of the Ferrell property described above. The FFS is recommended as lead manager for the remainder of the project.

Conditions affecting intensity of management

A. Division of Recreation and Parks

Under fee title acquisition, the Wakulla Springs Protection Zone will be a high-need management area. Resource restoration, public recreation, environmental

education and development compatible with long-term resource protection will be an integral aspect of management. The areas around karst windows, springs and associated sloughs are often, and in some cases currently are being, subjected to inappropriate uses and levels of use that degrade the resource. In particular, the lands between the park and the national forest, west of State Road 61, contain a significant number of hydrological features which will require intensive management of people to ensure against resource degradation by users and allow for restoration where needed. Springs, karst windows and sinks are popular recreation sites. Hence, there will be a demand for their use. Close monitoring and study will be needed to decide which are suitable for public use and at what levels, followed with appropriate management measures.

The Ferrell Property represents a relatively intact long-leaf pine/wire grass community. Land uses in the general area have severely impacted this community type. Close attention will need to be paid to ensure the perpetuation of this community through appropriate burning and other management practices, if acquired in fee title. This concept also applies to other areas of the project managed by the DRP where the natural regime has been disturbed by silviculture and other land uses.

B. Florida Forest Service

Many areas of the project will require considerable restoration efforts. Until these efforts are completed, the level of management intensity and related management costs is expected to be somewhat higher than what would be expected on a typical state forest.

C. Fish and Wildlife Conservation Commission

The proposal generally includes lands that are low-need tracts requiring basic resource management, including the frequent use of prescribed fire. The primary management needed for perpetuation of the natural communities on the area is the introduction of all-season prescribed fire and control of human access. On portions of existing disturbed areas such as the agricultural fields, native and non-native agronomic plantings will be used to benefit both game and non-game wildlife on the area and to promote special hunting and wildlife viewing opportunities for the general public. Development of facilities, as on all wildlife management areas, would be kept to the minimum level to assure a high-quality recreational experience for those members of the public interested in less infrastructure and other disturbance factors.

Timetable for implementing management and provisions for security and protection of infrastructure

A. Division of Recreation and Parks

Upon fee title acquisition, public access will be provided for low-intensity, non-facility-related outdoor recreation. As a part of the Wakulla Springs State Park, hunting would not be permitted. Vehicular access by the public will be confined to designated points and routes. Particular emphasis will be given to protection of springs and associated sloughs, sinks and karst windows. Resource management activities in the first year of each fee title acquisition will concentrate on site security (including posting boundaries) and development of a resource inventory in conjunction with the development of a comprehensive management plan.

Long-term management may include a wide range of resource-based recreation and associated facilities. The integration of appropriate public uses will create wildlife and recreational linkages between the State Park and the national forest.

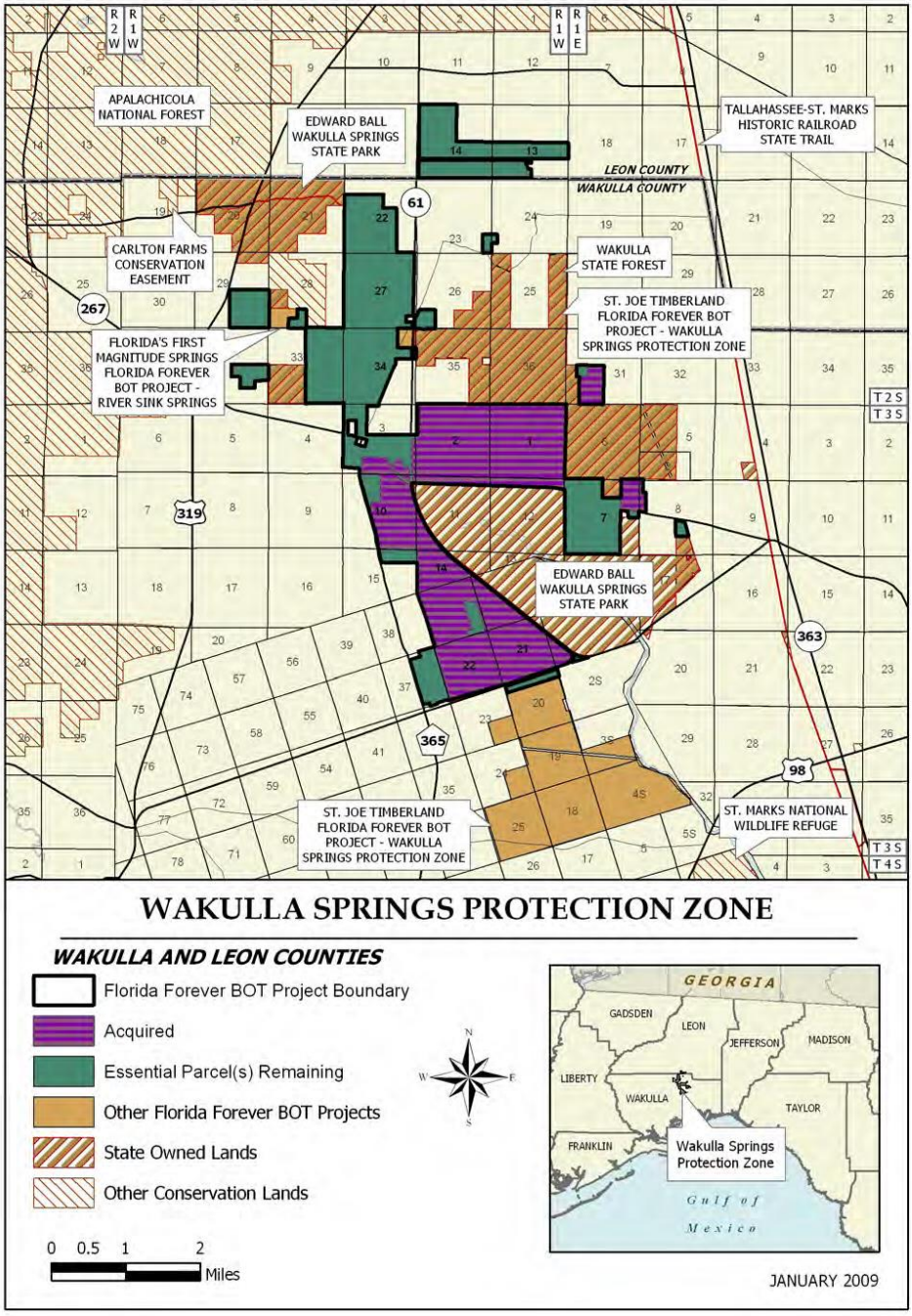
B. Florida Forest Service

Once the core area is acquired and assigned to the FFS, public access will be provided for non-facilities-related, low-intensity outdoor recreation. Until specific positions are provided for the project, public access will be coordinated through the FFS's Tallahassee District Headquarters and management activities will be conducted with district personnel.

Initial or intermediate management efforts will concentrate on site security, public and fire management access, resource inventory, and removal of existing trash. Steps will be taken to insure that the public is provided appropriate access while simultaneously affording protection of sensitive resources. Vehicular use by the public will be confined to designated roads. Any unnecessary access points will be closed. An inventory of the site's natural resources and threatened and endangered flora and fauna will be conducted to provide the basis for formulation of a management plan.

Prior to collection of necessary resource information, management proposals for this project can only be conceptual in nature. Long-range plans for this property will generally be directed toward the restoration of disturbed areas and maintenance of natural communities. Management activities will also stress enhancement of the abundance and spatial distribution of threatened and endangered species. To the greatest extent practical, disturbed sites will be restored to conditions that would be expected to occur in naturally functioning ecosystems. Pine plantations will be thinned to achieve a more natural appearance. Off-site species will eventually be replaced with species that would be expected to occur naturally on the site. An all-season burning program will be established, utilizing practices that incorporate recent research findings.

Wakulla Springs Protection Zone



Whenever possible, existing roads, black lines, foam lines and natural breaks will be utilized to contain and control prescribed and natural fires. Timber management activities will primarily consist of improvement thinnings and regeneration harvests aimed at maintaining and perpetuating forest ecosystems. Stands will not have a targeted rotation age but will be managed to maintain a broad diversity of age classes ranging from young stands to areas with old growth characteristics. This will provide habitat for the full spectrum of species that would be found in the natural environment. The resource inventory will be used to identify sensitive areas that need special attention, protection or management, and to locate areas that are appropriate for any recreational or administrative facilities. Infrastructure development will primarily be located in already disturbed areas and will be the absolute minimum required to allow public access for the uses mentioned above, to provide facilities to accommodate public use, and to administer and manage the property.

The FFS will promote recreation and environmental education in the natural environment. It is not anticipated that recreational facilities will be developed. However, if it is determined that facilities are needed, the use of low impact, rustic facilities will be stressed. High impact, organized recreation areas will be discouraged because of possible adverse effects on the natural environment. Unnecessary roads, firelines and hydrological disturbances will be abandoned and/or restored to the greatest extent practical.

C. Fish and Wildlife Conservation Commission

During the first year after acquisition, emphasis will be placed on site security, posting boundaries, public access, fire management, resource inventory and removal of existing refuse. A conceptual management plan will be developed by the FWCC, describing the goals and objectives of future resource management. Long-range plans will stress ecosystem management, the protection and management of threatened and endangered species and the management of small game hunting opportunities. Essential roads will be stabilized to provide all weather public access and manage operations. Programs providing multiple recreational uses will also be implemented. An all-season prescribed burning management plan will be developed and implemented using conventional and biologically acceptable guidelines. Management activities will strive to manage natural plant communities to benefit native wildlife resources.

Where appropriate and practical, timber resources will be managed using acceptable silvicultural practices as recommended by the FFS. These practices will include reforestation of cleared pinelands and natural regeneration of pine plantations.

Revenue-generating potential The DRP expects no significant revenue from this property immediately after fee title acquisition, and the amount of any future revenue will depend on the nature and extent of public use and facilities developed. The FFS will sell timber as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in upland pine stands and will provide a variable source of revenue, but the revenue-generating potential of this project is expected to be moderate. The FWCC may also sell timber to help offset operational costs. Future revenue from timber resources will depend on successful reforestation and management of cleared pinelands. Additional revenue would be generated from sales of hunting licenses, fishing licenses, wildlife management area stamps and other special hunting stamps or permits.

Cooperators in management activities The DRP will, as appropriate, cooperate with local governments, other state agencies, and the water management district to further resource management, recreational and educational opportunities, and the development of the lands for state park purposes. The FFS and the FWCC will also cooperate with other state and local governmental agencies in managing the area.

Updated 2/29/2012

Management Cost Summaries:

DRP Category Source--Funds	Startup CARL	Recurring CARL	FFS Category Source--Funds	Startup CARL	FWC Category Source--Funds	Startup CARL	Recurring CARL
Salary	$48,840	$48,840	Salary	$65,343	Salary	$37,170	$74,340
OPS	$10,000	$10,000	OPS	$0	OPS	$7,000	$7,000
Expense	$86,342	$6,342	Expense	$90,000	Expense	$45,000	$60,000
OCO	$58,956	$0	OCO	$129,000	OCO	$38,500	$38,500
FCO	$0	$0	FCO	$0	FCO	$75,000	$0
TOTAL	$204,138	$65,142	TOTAL	$284,343	TOTAL	$202,670	$179,840

Exhibit I

Department of State Report on Archeological Sites and Historical Sites

This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333 for project review information.

May 22, 2014

Florida Master Site File

Jennifer Reed
Florida Forestry Service
3125 Conner Boulevard Tallahassee, FL 32399
Phone: 850-681-5828
Email: Jennifer.reed@freshfromflorida.com

In response to your inquiry of May 22, 2014 the Florida Master Site File lists three previously recorded archaeological sites, no resource groups, one historic cemetery and no standing structures found within the **Wakulla State Forest** located in Leon & Wakulla County.

When interpreting the results of our search, please consider the following information:

- **This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.**
- **Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.**
- **While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.**
- **Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.**

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Mary G Berman

Mary Berman
Archaeological Analyst
Florida Master Site File
mary.berman@dos.state.fl.us

AR=3
SS=0
CM=1
RG=0
BR=0
Total=4

Cultural Resource Roster

SiteID	Type	Site Name	Address	Additional Info	SHPO Eval	NR Status
LE04212	CM	BOATWRIGHT CEMETERY	WOODVILLE	Established c1871, Graves = 6		
WA00045	AR	DEADMAN'S SPRING				
WA00404	AR	WEST HOLE	WOODVILLE			
WA00405	AR	WEST HOLE SOUTH	WOODVILLE			

Exhibit J

Management Procedures
for
Archaeological and Historical Sites and Properties on State Owned or Controlled Lands

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties
(revised March 2013)

These procedures apply to state agencies, local governments, and non-profits that manage state-owned properties.

A. General Discussion

Historic resources are both archaeological sites and historic structures. Per Chapter 267, Florida Statutes, *'Historic property' or 'historic resource' means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state."*

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at:
http://www.flheritage.com/preservation/compliance/guidelines.cfm

D. Management Implementation

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. Recommendations may include, but are not limited to: approval of the project as submitted, cultural resource assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination**.** In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at:
http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf .

* * *

Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

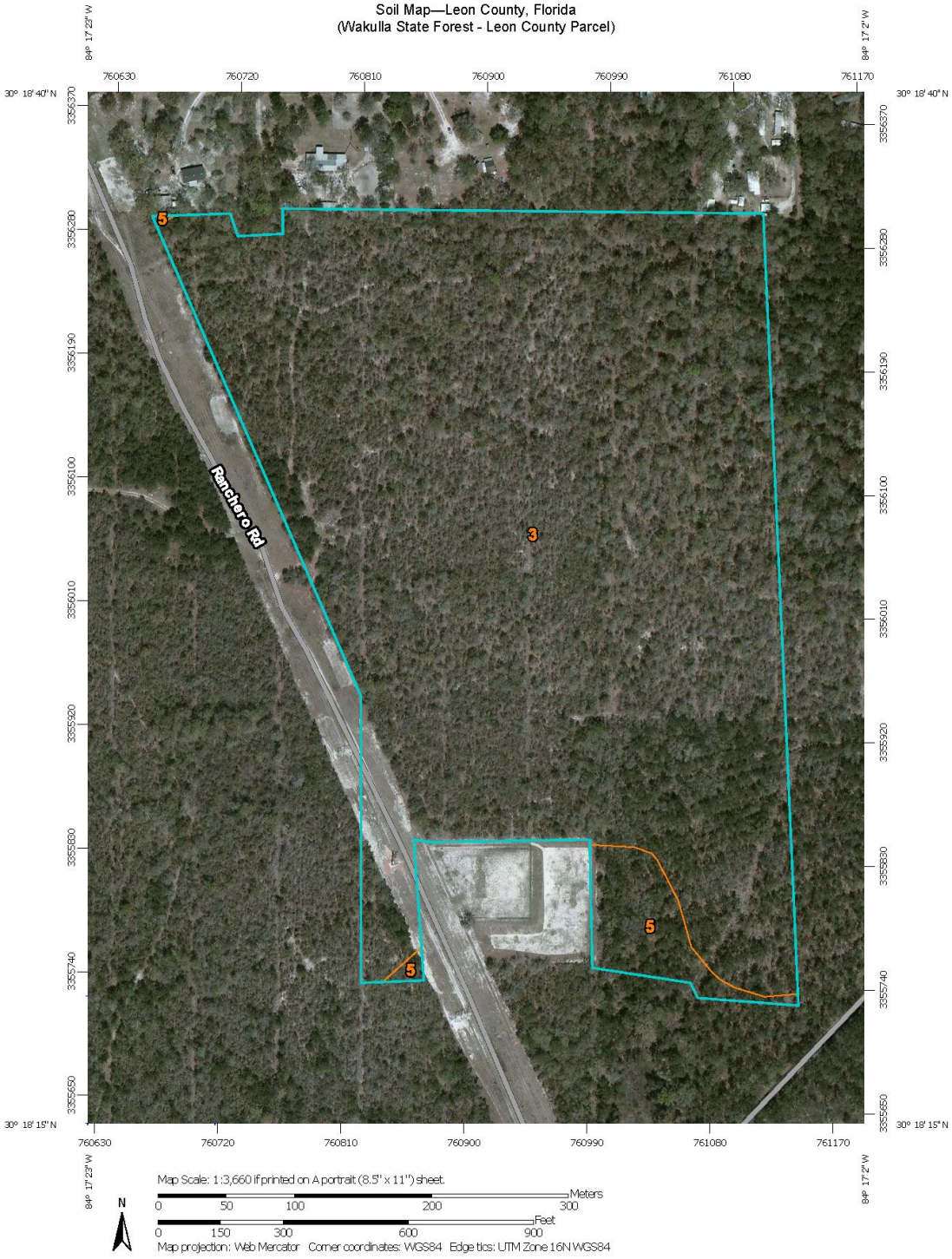
Deena S. Woodward
Division of Historical Resources
Bureau of Historic Preservation
Compliance and Review Section
R. A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

Phone: (850) 245-6425
Toll Free: (800) 847-7278
Fax: (850) 245-6435

Exhibit K

Soil Maps and Descriptions

Soil Map—Leon County, Florida
(Wakulla State Forest - Leon County Parcel)



Map Unit Legend

Leon County, Florida (FL073)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
3	Alpin sand, 0 to 5 percent slopes	44.3	96.1%
5	Blanton fine sand, 0 to 5 percent slopes	1.8	3.9%
Totals for Area of Interest		**46.2**	**100.0%**

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Leon County, Florida
Survey Area Data: Version 11, Dec 3, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 4, 2010—Jan 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Component Legend

This report presents general information about the map units and map unit components in the selected area. It shows map unit symbols and names and the components in each map unit. It also shows the percent of the components in the map units, the kind of component, and the slope range of each component.

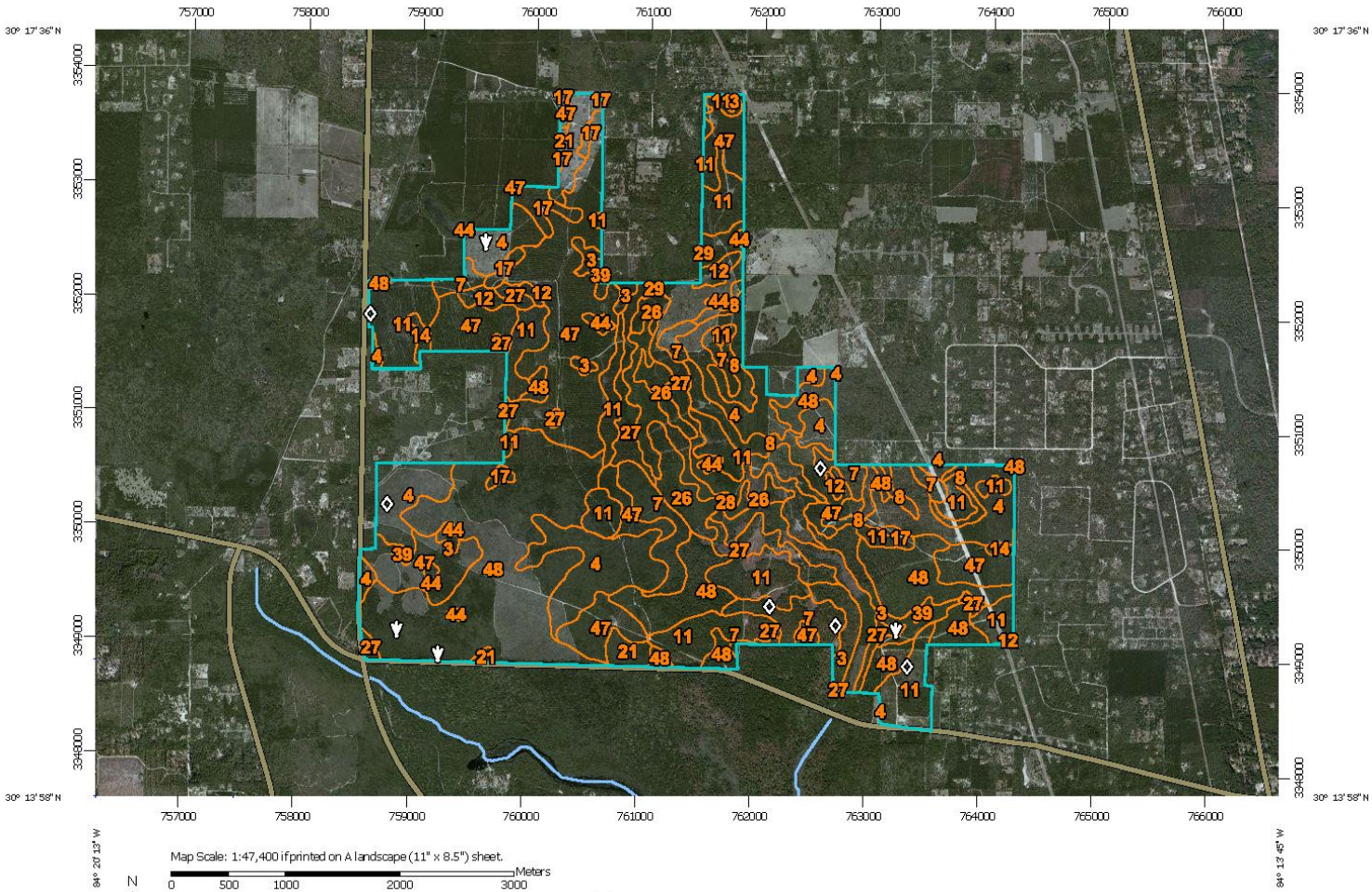
Report—Component Legend

Component Legend–Leon County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
3—Alpin sand, 0 to 5 percent slopes	17,610						
		85	Alpin	Series	0.0	3.0	5.0
		5	Troup	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		3	Kershaw	Series	0.0	3.0	5.0
		2	Ortega	Series	0.0	3.0	5.0
5—Blanton fine sand, 0 to 5 percent slopes	20,915						
		80	Blanton	Series	0.0	3.0	5.0
		5	Albany	Series	0.0	1.0	2.0
		5	Troup	Series	0.0	3.0	5.0
		4	Chipley	Series	0.0	1.0	2.0
		3	Kershaw	Series	0.0	3.0	5.0
		3	Norfolk	Series	2.0	4.0	5.0

Data Source Information

Soil Survey Area: Leon County, Florida
Survey Area Data: Version 11, Dec 3, 2013

Soil Map—Wakulla County, Florida
(Wakulla State Forest)



Map Scale: 1:47,400 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 2000 4000 8000 12000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Map Unit Legend

Wakulla County, Florida (FL129)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
3	Lutterloh sand, 0 to 5 percent slopes	136.1	3.3%
4	Alpin sand, 0 to 5 percent slopes	546.6	13.4%
7	Otela fine sand, 0 to 5 percent slopes	210.0	5.1%
8	Otela sand, 5 to 8 percent slopes	152.0	3.7%
11	Shadeville fine sand, 0 to 5 percent slopes	589.2	14.4%
12	Shadeville-Seaboard fine sands, 0 to 3 percent slopes	40.1	1.0%
14	Ridgewood fine sand, 0 to 5 percent slopes	15.7	0.4%
17	Ortega sand, 0 to 5 percent slopes	70.5	1.7%
21	Lakeland sand, 0 to 5 percent slopes	69.6	1.7%
26	Tooles-Nutall fine sands	126.9	3.1%
27	Moriah-Pilgrims fine sands	309.6	7.6%
28	Tooles-Nutall fine sands, frequently flooded	152.8	3.7%
29	Tooles-Nutall-Chaires fine sands	3.8	0.1%
39	Surrency mucky fine sand	8.9	0.2%
44	Tooles-Nutall fine sands, depressional	28.2	0.7%
47	Otela-Alpin fine sands, 0 to 5 percent slopes	714.9	17.5%
48	Otela, limestone substratum-Ortega sands, 0 to 5 percent slopes	917.9	22.4%
Totals for Area of Interest		**4,092.9**	**100.0%**

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wakulla County, Florida
Survey Area Data: Version 8, Dec 27, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 4, 2010—Jan 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Component Legend

This report presents general information about the map units and map unit components in the selected area. It shows map unit symbols and names and the components in each map unit. It also shows the percent of the components in the map units, the kind of component, and the slope range of each component.

Report—Component Legend

Component Legend–Wakulla County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
3—Lutterloh sand, 0 to 5 percent slopes	6,880						
		85	Lutterloh	Series	0.0	3.0	5.0
		4	Otela	Series	0.0	3.0	5.0
		4	Ortega	Series	0.0	3.0	5.0
		4	Ridgewood	Series	0.0	3.0	5.0
		3	Plummer	Series	0.0	1.0	2.0
4—Alpin sand, 0 to 5 percent slopes	8,600						
		88	Alpin	Series	0.0	3.0	5.0
		5	Otela	Series	0.0	3.0	5.0
		4	Shadeville	Series	0.0	3.0	5.0
		3	Hurricane	Series	0.0	3.0	5.0
7—Otela fine sand, 0 to 5 percent slopes	7,590						
		85	Otela	Series	0.0	3.0	5.0
		5	Alpin	Series	0.0	3.0	5.0
		5	Ortega	Series	0.0	3.0	5.0
		5	Lutterloh	Series	0.0	3.0	5.0
8—Otela sand, 5 to 8 percent slopes	370						
		85	Otela	Series	5.0	7.0	8.0
		5	Ortega	Series	5.0	7.0	8.0
		5	Lakeland	Series	5.0	7.0	8.0
		5	Lutterloh	Series	0.0	3.0	5.0

Component Legend–Wakulla County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
11—Shadeville fine sand, 0 to 5 percent slopes	5,860						
		90	Shadeville	Series	0.0	3.0	5.0
		2	Seaboard	Series	0.0	2.0	3.0
		2	Ortega	Series	0.0	3.0	5.0
		2	Tooles	Series	0.0	1.0	1.0
		2	Moriah	Series	0.0	1.0	2.0
		1	Ridgewood	Series	0.0	3.0	5.0
		1	Pilgrims	Series	0.0	1.0	2.0
12—Shadeville-Seaboard fine sands, 0 to 3 percent slopes	2,350						
		63	Shadeville	Series	0.0	3.0	5.0
		33	Seaboard	Series	0.0	2.0	3.0
		1	Moriah	Series	0.0	1.0	2.0
		1	Ortega	Series	0.0	3.0	5.0
		1	Pilgrims	Series	0.0	1.0	2.0
		1	Ridgewood	Series	0.0	3.0	5.0
14—Ridgewood fine sand, 0 to 5 percent slopes	23,740						
		85	Ridgewood	Series	0.0	3.0	5.0
		3	Ortega	Series	0.0	3.0	5.0
		3	Tooles	Series	0.0	1.0	1.0
		3	Scranton	Series	0.0	1.0	2.0
		3	Moriah	Series	0.0	1.0	2.0
		3	Lutterloh	Series	0.0	3.0	5.0
17—Ortega sand, 0 to 5 percent slopes	24,110						
		85	Ortega	Series	0.0	3.0	5.0
		3	Scranton	Series	0.0	1.0	2.0
		3	Otela	Series	0.0	3.0	5.0
		3	Ridgewood	Series	0.0	3.0	5.0
		3	Shadeville	Series	0.0	3.0	5.0
		3	Hurricane	Series	0.0	3.0	5.0

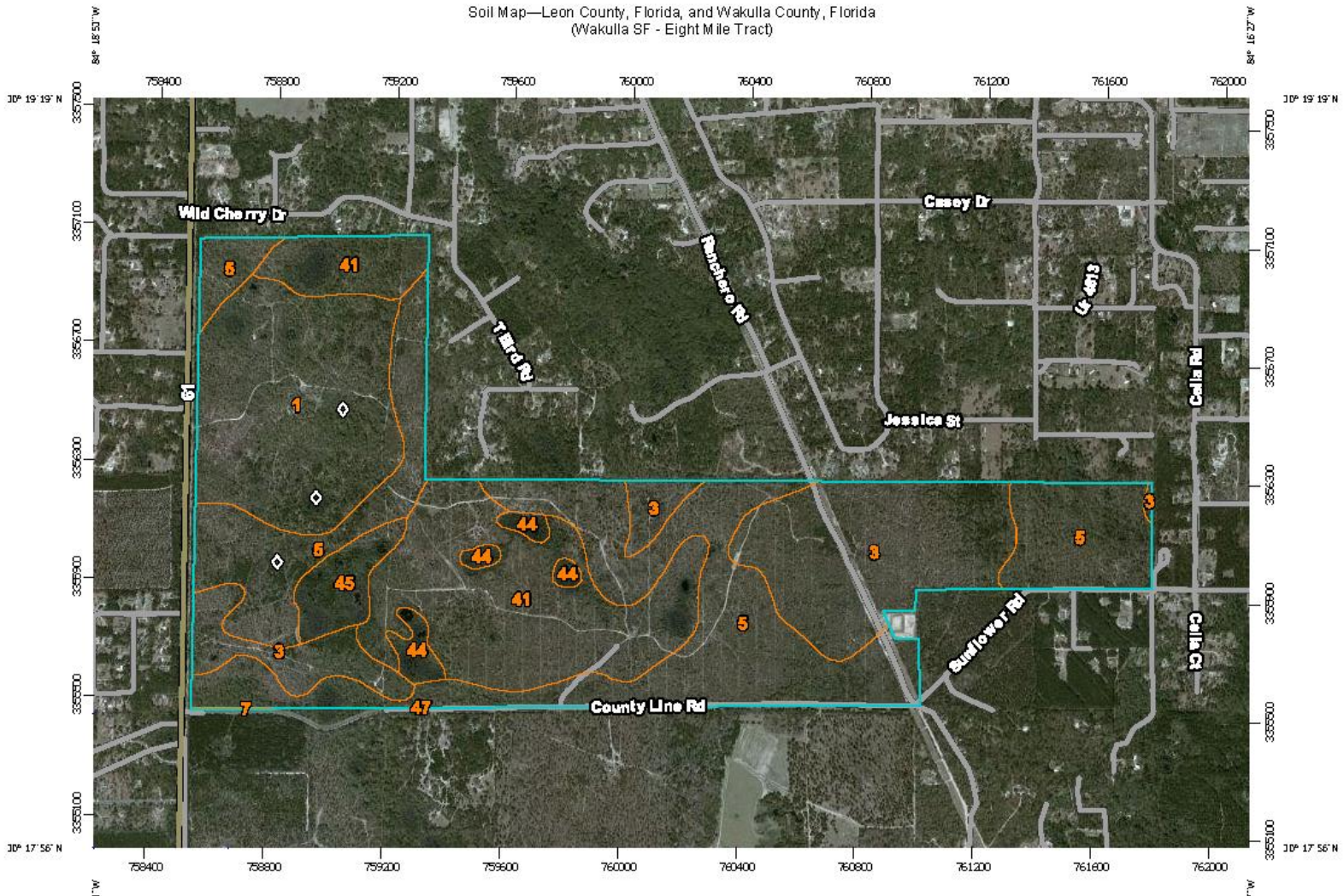
Component Legend–Wakulla County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
21—Lakeland sand, 0 to 5 percent slopes	7,070						
		92	Lakeland	Series	0.0	3.0	5.0
		3	Otela	Series	0.0	3.0	5.0
		3	Ridgewood	Series	0.0	3.0	5.0
		2	Shadeville	Series	0.0	3.0	5.0
26—Tooles-Nutall fine sands	20,080						
		45	Tooles, non-hydric	Series	0.0	1.0	1.0
		24	Nutall	Series	0.0	1.0	1.0
		15	Tooles, hydric	Series	0.0	1.0	1.0
		4	Surrency	Series	0.0	0.6	1.0
		4	Leon	Series	0.0	1.0	2.0
		4	Chaires	Series	0.0	1.0	2.0
		4	Plummer	Series	0.0	1.0	2.0
27—Moriah-Pilgrims fine sands	7,430						
		67	Moriah	Series	0.0	1.0	2.0
		28	Pilgrims	Series	0.0	1.0	2.0
		2	Shadeville	Series	0.0	3.0	5.0
		1	Leon	Series	0.0	1.0	2.0
		1	Chaires	Series	0.0	1.0	2.0
		1	Tooles	Series	0.0	1.0	1.0
28—Tooles-Nutall fine sands, frequently flooded	6,310						
		49	Tooles, frequently flooded	Series	0.0	1.0	1.0
		43	Nutall, frequently flooded	Series	0.0	1.0	1.0
		3	Tooles	Series	0.0	1.0	1.0
		3	Nutall	Series	0.0	1.0	1.0
		2	Chaires	Series	0.0	1.0	2.0
29—Tooles-Nutall-Chaires fine sands	16,820						
		39	Tooles	Series	0.0	1.0	1.0
		34	Nutall	Series	0.0	1.0	1.0
		26	Chaires	Series	0.0	1.0	1.0
		1	Rutlege	Series	0.0	1.0	2.0

Component Legend–Wakulla County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
39—Surrency mucky fine sand	10,430						
		84	Surrency	Series	0.0	0.6	1.0
		6	Rutlege	Series	0.0	1.0	2.0
		5	Croatan	Taxadjunct	0.0	0.8	1.0
		5	Plummer	Series	0.0	1.0	2.0
44—Tooles-Nutall fine sands, depressional	3,980						
		52	Tooles, depressional	Series	0.0	0.5	1.0
		38	Nutall, depressional	Series	0.0	0.5	1.0
		4	Surrency	Series	0.0	0.6	1.0
		4	Rutlege	Series	0.0	1.0	2.0
		2	Chaires	Series	0.0	1.0	2.0
47—Otela-Alpin fine sands, 0 to 5 percent slopes	13,770						
		63	Otela	Series	0.0	3.0	5.0
		36	Alpin	Series	0.0	3.0	5.0
		1	Lutterloh	Series	0.0	3.0	5.0
48—Otela, limestone substratum-Ortega sands, 0 to 5 percent slopes	7,180						
		62	Otela, limestone substratum	Series	0.0	3.0	5.0
		29	Ortega	Series	0.0	3.0	5.0
		9	Lutterloh	Series	0.0	3.0	5.0

Data Source Information

Soil Survey Area: Wakulla County, Florida
Survey Area Data: Version 8, Dec 27, 2013

Soil Map—Leon County, Florida, and Wakulla County, Florida
(Wakulla SF - Eight Mile Tract)



Map Scale: 1:17,900 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 250 500 1000 1500

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:20,000 to 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Leon County, Florida
Survey Area Data: Version 12, Sep 26, 2014

Soil Survey Area: Wakulla County, Florida
Survey Area Data: Version 9, Sep 26, 2014

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 4, 2010—Jan 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Leon County, Florida (FL073)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
1	Albany loamy sand	123.1	17.8%
3	Alpin sand, 0 to 5 percent slopes	133.2	19.3%
5	Blanton fine sand, 0 to 5 percent slopes	256.9	37.1%
41	Plummer fine sand	145.1	21.0%
44	Pickney soils, occasionally flooded	13.8	2.0%
45	Sapelo fine sand	19.1	2.8%
Subtotals for Soil Survey Area		**691.2**	**99.9%**
Totals for Area of Interest		**691.7**	**100.0%**

Wakulla County, Florida (FL129)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
7	Otela fine sand, 0 to 5 percent slopes	0.5	0.1%
47	Otela-Alpin fine sands, 0 to 5 percent slopes	0.0	0.0%
Subtotals for Soil Survey Area		**0.6**	**0.1%**
Totals for Area of Interest		**691.7**	**100.0%**

Component Legend

This report presents general information about the map units and map unit components in the selected area. It shows map unit symbols and names and the components in each map unit. It also shows the percent of the components in the map units, the kind of component, and the slope range of each component.

Report—Component Legend

Component Legend–Leon County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
1—Albany loamy sand	18,825						
		80	Albany	Series	0.0	1.0	2.0
		10	Troup	Series	0.0	3.0	5.0
		10	Plummer	Series	0.0	1.0	2.0
3—Alpin sand, 0 to 5 percent slopes	17,610						
		85	Alpin	Series	0.0	3.0	5.0
		5	Troup	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		3	Kershaw	Series	0.0	3.0	5.0
		2	Ortega	Series	0.0	3.0	5.0
5—Blanton fine sand, 0 to 5 percent slopes	20,915						
		80	Blanton	Series	0.0	3.0	5.0
		5	Troup	Series	0.0	3.0	5.0
		5	Albany	Series	0.0	1.0	2.0
		4	Chipley	Series	0.0	1.0	2.0
		3	Norfolk	Series	2.0	4.0	5.0
		3	Kershaw	Series	0.0	3.0	5.0
41—Plummer fine sand	20,425						
		50	Plummer, hydric	Series	0.0	1.0	2.0
		40	Plummer, non-hydric	Series	0.0	1.0	2.0
		10	Pelham	Series	0.0	1.0	2.0

Component Legend–Leon County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
44—Pickney soils, occasionally flooded	14,000						
		85	Pickney, occasionally flooded	Series	0.0	1.0	2.0
		3	Leon	Series	0.0	1.0	2.0
		3	Plummer	Series	0.0	1.0	2.0
		3	Pamlico	Series	0.0	0.6	1.0
		2	Dorovan	Series	0.0	0.6	1.0
		2	Talquin	Series	0.0	1.0	2.0
		2	Sapelo	Series	0.0	1.0	2.0
45—Sapelo fine sand	2,300						
		70	Sapelo, non-hydric	Series	0.0	1.0	2.0
		15	Sapelo, hydric	Series	0.0	1.0	2.0
		10	Plummer	Series	0.0	1.0	2.0
		5	Pickney	Series	0.0	1.0	2.0

Component Legend–Wakulla County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
7—Otela fine sand, 0 to 5 percent slopes	7,590						
		85	Otela	Series	0.0	3.0	5.0
		5	Ortega	Series	0.0	3.0	5.0
		5	Lutterloh	Series	0.0	3.0	5.0
		5	Alpin	Series	0.0	3.0	5.0
47—Otela-Alpin fine sands, 0 to 5 percent slopes	13,770						
		63	Otela	Series	0.0	3.0	5.0
		36	Alpin	Series	0.0	3.0	5.0
		1	Lutterloh	Series	0.0	3.0	5.0

Data Source Information

Soil Survey Area: Leon County, Florida
Survey Area Data: Version 12, Sep 26, 2014

Soil Survey Area: Wakulla County, Florida
Survey Area Data: Version 9, Sep 26, 2014

Exhibit L

Department of Environmental Protection
Outstanding Florida Waters

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

June 3, 2014

Ms. Jennifer Reed
Land Planning Coordinator
Florida Forestry Service
Florida Department of Agriculture & Consumer Services
The Conner Building
3125 Conner Boulevard - Room 237
Tallahassee, FL 32399-1650

RE: Land Use Plan for Wakulla State Forest

Dear Ms. Reed:

Thank you for your inquiry regarding the surface water quality classifications on and near Wakulla State Forest in Leon and Wakulla Counties. The southern portion of the forest is located near Wakulla Springs State Park, which has been designated as Outstanding Florida Waters (subparagraph 62-302.700(9)(c)20., Florida Administrative Code (FAC)). Note, however, that Wakulla State Forest is separated from Wakulla Springs State Park by Highway 267, which provides some isolation of the site from the park. Any surface waters on the site are classified as Class III waters (subparagraphs 62-302.400(16)(b)37. and 62-302.400(16)(b)65., FAC), which is the statewide default classification.

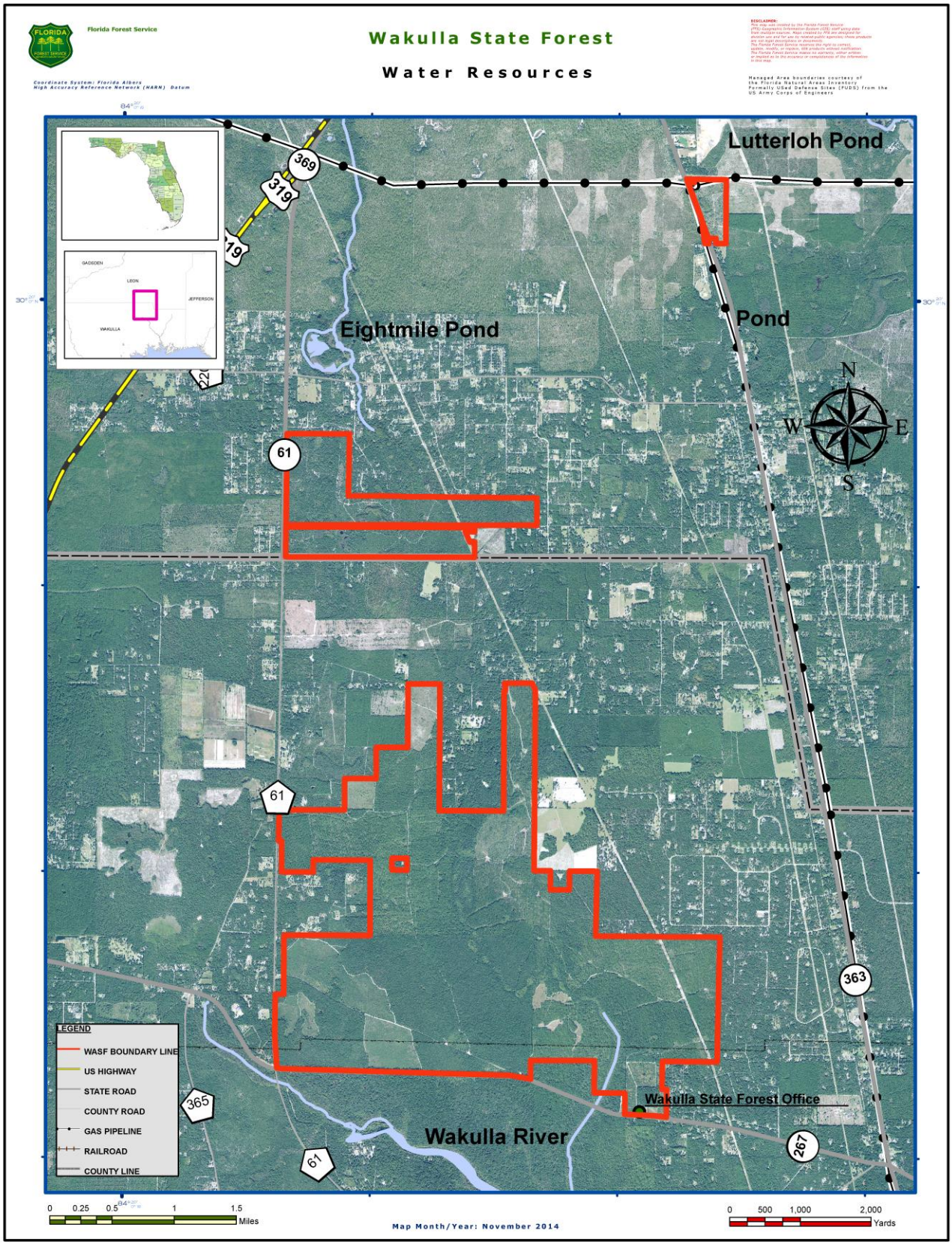
If you have any questions or need additional information, please feel free to contact me at the letterhead address (mail station 6511), by phone at 850/245-8429, or via E-mail at Eric.Shaw@dep.state.fl.us.

Sincerely,

Eric R. Shaw
Environmental Manager
Standards Development Section

Exhibit M

Water Resources


Florida Forest Service
Wakulla State Forest
Water Resources
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
Lutterloh Pond
Eightmile Pond
Pond
Wakulla River
Wakulla State Forest Office
369
319
61
363
365
267
N
S
E
W
LEGEND
WASF BOUNDARY LINE
US HIGHWAY
STATE ROAD
COUNTY ROAD
GAS PIPELINE
RAILROAD
COUNTY LINE
0 0.25 0.5 1 1.5
Miles
0 500 1,000 2,000
Yards
Map Month/Year: November 2014

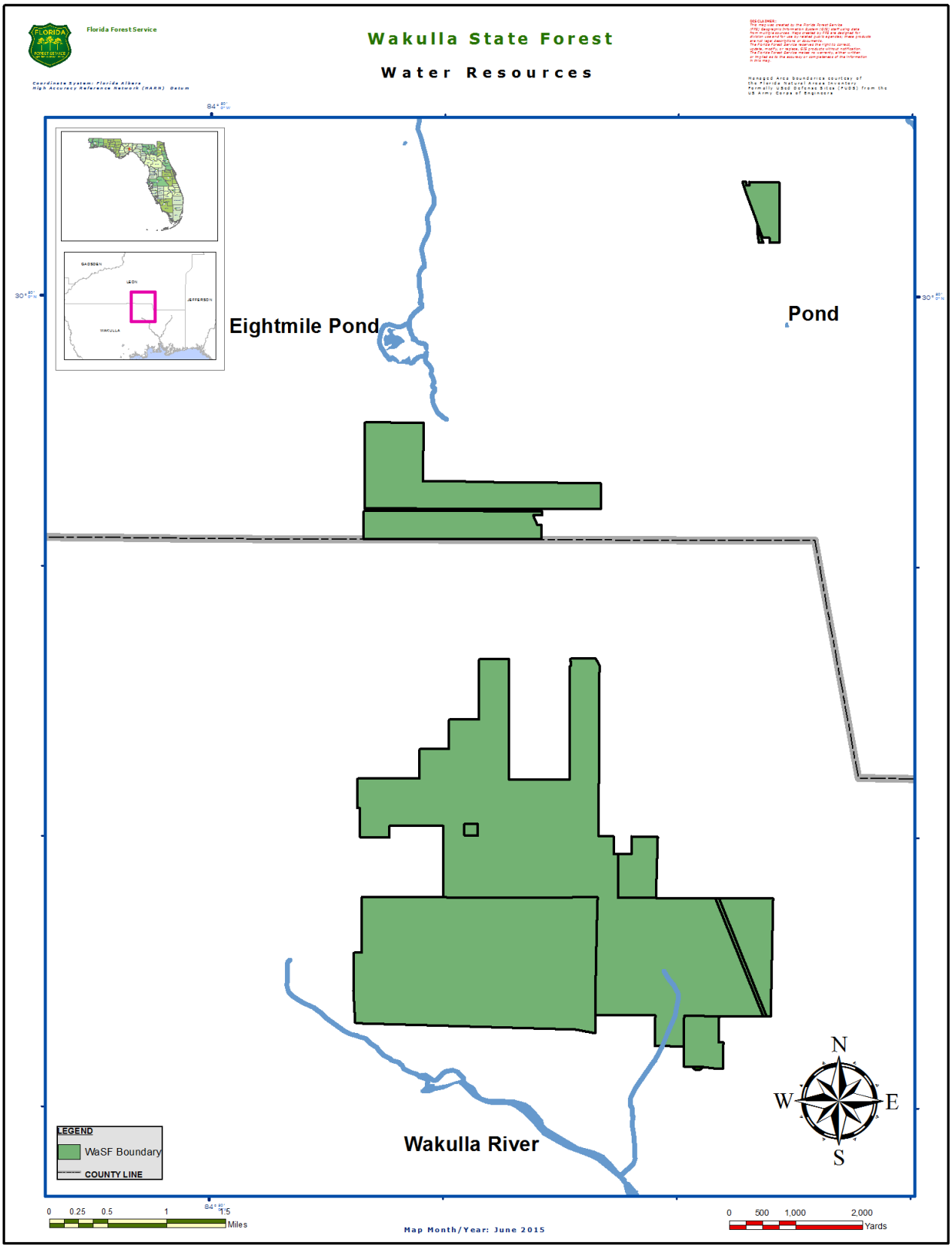

Florida Forest Service
Wakulla State Forest
Water Resources
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
Managed Area Boundaries courtesy of
the Florida Natural Areas Inventory
Formally (DOD) Defense Sites (FUDS) from the
US Army Corps of Engineers
84° 30' W
30° 30' N
GADSDEN
LEON
JEFFERSON
WAKULLA
Eightmile Pond
Pond
Wakulla River
N
W
E
S
LEGEND
WaSF Boundary
COUNTY LINE
0 0.25 0.5 1 1.5
Miles
0 500 1,000 2,000
Yards
Map Month/Year: June 2015

Exhibit N

Florida Natural Areas Inventory
Managed Area Tracking Record

FLORIDA Natural Areas INVENTORY

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

June 5, 2014

Jennifer Reed
FL Dept of Agriculture & Consumer Services
Florida Forest Service
Conner Bldg., 3125 Conner Boulevard
Tallahassee, FL 32399-1650

Dear Ms. Reed,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: Wakulla State Forest

Date Received: 5/29/2014

Location: Wakulla and Leon Counties

Based on the information available, this site appears to be located in a significant region of natural areas and habitat for several rare species. Special consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

FNAI Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The FNAI Element Occurrences data layer includes rigorously documented occurrences of rare species and natural communities. For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrence labels indicate the general vicinity of the occurrence. This may be due to lack of precision of the source data, or an element that covers an extended area (such as a wide-ranging species or large natural community). Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

*Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.*

Biodiversity Matrix

In addition to element occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models. The Biodiversity Matrix Report

Florida Resources and Environmental Analysis Center

Institute of Science and Public Affairs

The Florida State University

compiles several data sources – including Element Occurrences, occurrence-based species habitat models, predictive range models, and natural community maps – to provide a broader list of documented, likely, and potential species on or near the site. These species could be taken into consideration in field surveys, land management, and land use decisions. Note that the Biodiversity Matrix Report lists species and communities by square-mile Matrix Unit, rather than by the site of interest, so the Documented list may vary from the Element Occurrence Table supplied with this report. Also, note that this list aggregates results from all matrix units that overlap the site, so the location of the elements are somewhat obscured.

FNAI occurrence-based habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species predictive range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

Thank you for your use of FNAI services. If I can be of further assistance, please contact me at (850) 224-8207 or at npasco@fnai.org.

Sincerely,

Nathan Pasco

Nathan Pasco
GIS / Data Services

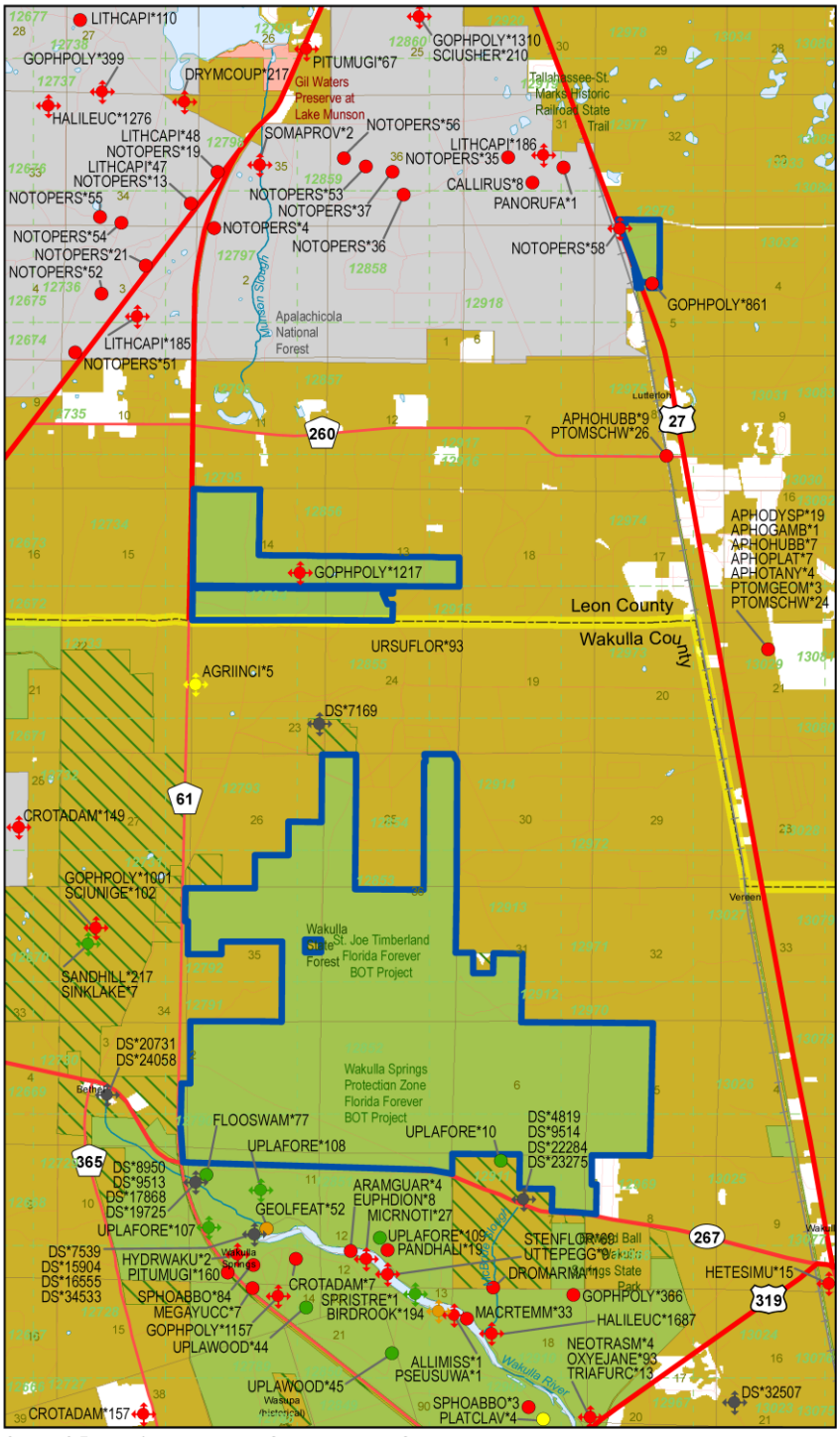
Encl

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

FLORIDA Natural Areas INVENTORY

Wakulla State Forest

Wakulla and Leon Counties



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive
- Point Indicates General Vicinity of Element
- U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects
- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.

N

0 0.5 1 2 3 Miles

Map produced by NDP
6/4/2014

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

FNAI ELEMENT OCCURRENCE REPORT on or near

Wakulla State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
AGRIINCI*5	*Agrimonia incisa*	Incised Groove-bur	G3	S2	N	LE	1986-11-07	SITE OF CLEAR CUT LONGLEAF PINE AND SCRUB OAKS ON SAND RIDGE.	ONE CLUMP SEEN
ALLIMISS*1	*Alligator mississippiensis*	American Alligator	G5	S4	SAT	FT(S/A)	2013-06-18	SPRING RUN STREAM WITH ABUNDANT VEGETATION. RIVER EMANATES FROM FIRST MAGNITUDE SPRING WITH AVERAGE DISCHARGE OF 663 CUBIC M/MIN; AVERAGE WIDTH 150 M. VEGETATION INCLUDES OLD GROWTH BALD CYPRESS MID-CHANNEL, AND NUMEROUS SHRUBS AND VINES (RHUS, VITIS, MI	Contact FL Division of Recreation and Parks for more comprehensive data. 1986-2013: D. Jackson has regularly observed alligators in many parts of the river (PNDJAC01FLUS). 2005: population observed annually within upper 5 km of river in state park, inc
APHOHUBB*9	*Aphodius hubbelli*	Hubbell's Pocket Gopher Aphodius Beetle	GNR	S3?	N	N	1996-11-09 -- 1996-11-16	1996-11-16: No information given (U06SKE01FLUS).	1996-11-16: One specimen was collected from 1996-11-09 to 1996-11-16, most likely in a malt and dung-baited pitfall trap in a pocket gopher burrow (U06SKE01FLUS, A01SKE02FLUS, A91SKE01FLUS).
ARAMGUAR*4	*Aramus guarauna*	Limpkin	G5	S3	N	SSC	2001-09-27	2007: dramatic decline in apple snails is possibly cause in decline of Limpkin population. Increased nitrogen and hydrilla invasion are possible environmental catalysts for snail decline (PNDSAV02FLUS). 2005: Exotic vegetation, chiefly Hydrilla, became	2005: population has all but disappeared, with only an occasional visitor; reflects nearly complete loss of apple snails from river (PNDJAC01FLUS). 2001-09-27: observed on the river (PNDJUE01FLUS, PNDJUE02FLUS). 1980s, 1970s: STABLE RESIDENT POPULATION
BIRDROOK*194	Bird Rookery		G5	SNR	N	N	1989-08-29	CYPRESS AND OTHER TREES ON NORTHEASTERN BANK OF WAKULLA RIVER, SPRING-FED STREAM.	DOUBLE CRESTED CORMORANT ROOKERY, WITH NEARLY 300 NESTS IN 1989.
CALLIRUS*8	*Callophrys irus*	Frosted Elfin	G3	S1	N	N	2010-04-19	2010-04-11: The site is sandhill interspersed with off-road bike trails. The host plant for the Frosted Elfin grows in the area.	2012-03-22: There has been no evidence of either larvae or adult Frosted Elfins since spring 2010 despite several surveys of the sites occupied by this species during 2011 and 2012. (PNDJUE01FLUS). 2010-04-19: Approximately 20 caterpillars were found by

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Suite 200-C
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(850) 681-9364 Fax
www.fnai.org

FNAI ELEMENT OCCURRENCE REPORT on or near

Wakulla State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
CROTADAM*149	*Crotalus adamanteus*	Eastern Diamondback Rattlesnake	G4	S3	N	N	1992	No general description given	1992: One 4 ft. snake observed; 1990: One 3 ft. snake observed (U95CAI01). 1975-10-27: Occurrence on site (S75MOLSM).
CROTADAM*7	*Crotalus adamanteus*	Eastern Diamondback Rattlesnake	G4	S3	N	N	1994-06-19	1994-06-19: Flatwoods/Mixed Hardwoods (PNDMEA01FLUS).	1994-06-19: Four ft. adult observed at driveway (U94WHI01FLUS). One 4-4.5 ft. adult female observed (U95MEA01FLUS).
DROMARMA*1	*Dromogomphus armatus*	Southeastern Spinyleg	G4	S3	N	N	2006-10-04	2006-10-04: No description given (U09DEP01FLUS).	2006-10-04: Staff from the Florida Department of Environmental Protection collected this species (U09DEP01FLUS).
DS*15904	*Data Sensitive Element*	Data Sensitive	G1	S1	N	N	1989-PRE	Data Sensitive	Data Sensitive
DS*16555	*Data Sensitive Element*	Data Sensitive	G1	S1	N	N	1957-05-04	Data Sensitive	Data Sensitive
DS*17868	*Data Sensitive Element*	Data Sensitive	G1	S1	N	N	1989-Pre	Data Sensitive	Data Sensitive
DS*19725	*Data Sensitive Element*	Data Sensitive	G2G3	S2S3	N	N	1987-12-09	Data Sensitive	Data Sensitive
DS*20731	Data Sensitive Element		G3	S3	N	N	2000	Data Sensitive	Data Sensitive
DS*22284	*Data Sensitive Element*	Data Sensitive	G1	S1	N	N	1983-Pre	Data Sensitive	Data Sensitive
DS*23275	*Data Sensitive Element*	Data Sensitive	G2G3	S2S3	N	N	1987-11-29	Data Sensitive	Data Sensitive
DS*24058	*Data Sensitive Element*	Data Sensitive	G1	S1	N	N	1983-PRE	Data Sensitive	Data Sensitive
DS*34533	*Data Sensitive Element*	Data Sensitive	G2G3	S2S3	N	N	1987-12-01	Data Sensitive	Data Sensitive
DS*4819	Data Sensitive Element		G3	S3	N	N	2000	Data Sensitive	Data Sensitive
DS*7169	Data Sensitive Element		G2	S2	N	N	2001-08	Data Sensitive	Data Sensitive
DS*7539	Data Sensitive Element		G3	S3	N	N	2005	Data Sensitive	Data Sensitive
DS*8950	Data Sensitive Element		G3	S3	N	N	2000	Data Sensitive	Data Sensitive
DS*9513	*Data Sensitive Element*	Data Sensitive	G2G3	S2S3	N	N	1994-PRE	Data Sensitive	Data Sensitive
DS*9514	*Data Sensitive Element*	Data Sensitive	G2G3	S2S3	N	N	1989	Data Sensitive	Data Sensitive
EUPHDION*8	*Euphyes dion*	Dion Skipper	G4	S2S3	N	N	2006-10-01	2006-10-01: The site was a small marshy spot with pickerelweed along the edge of the Wakulla River (PNDJUE02FLUS).	2006-10-01: One adult was seen and photographed (PNDJUE02FLUS).

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FLORIDA Natural Areas INVENTORY

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Wakulla State Forest

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FLOOSWAM*77	Floodplain swamp		G4	S4	N	N	2005-08	2002-02-03: Swamp borders the spring run from Sally Ward Spring to Wakulla Spring. Appears as dark grayish red signature on DOQQ aerial (PNDJOH01FLUS).	2004-08-28: Lobelia cardinalis flowering in wetter parts of swamp; Dichanthelium dichotomum common along edge - no standing water all across swamp up to edge of spring (PNDJOH01FLUS). 2002-02-03: moderately dense deciduous forest of tall straight trees
GEOLFEAT*52	*Geological feature*		GNR	SNR	N	N	2005	WAKULLA SPRINGS OCCUPIES A BASIN 4 1/2 ACRES IN SIZE WITH A DEPTH UP TO 80 FEET.	Contact FL Division of Recreation and Parks for comprehensive, updated information. FIRST MAGNITUDE SPRING. GEOLOGIC AGE: PEISTOCENE. 7TH LARGEST SPRING IN FLORIDA. 390 CFS IN THE AVERAGE FLOW. THE BONES OF MASTODONS, GIANT GROUND SLOTHS, AND OTHER ANIM
GOPHPOLY*1001	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	C	ST	1995-11-29	Degraded sandhill and upland pine forests with disturbed clearings; hardwood encroachment and ground cover suppression as a result of lack of fire.	1995-11-29: Small number of widely scattered active burrows, appears to be very sparse population, far below carrying capacity (especially if habitat is improved). (See F92JAC02FL, F95JAC03FL).
GOPHPOLY*1157	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	C	ST	2011	2005-06: Disturbed sandhill natural community. Some mature longleaf pine still present, plus young stages (planted?). Wiregrass has been transplanted onto site in some areas. Managed with prescribed fire. More fire is needed to reduce shrubby underst	2011: 117 burrow locations recorded - 37 active, 63 inactive, and 17 with no data; area near Lodge only had 2 active burrows but 15 with no data so this may change; area near Cherokee Sink appears better with 35 active and 48 inactive burrows (U11WAK01FL
GOPHPOLY*1217	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	C	ST	2005	2005: cut-over sandhill with numerous wetlands, including dome swamps, and karst depressions and sinks (U05GEO01FLUS). Aerial photography reveals that the western end of the Chason Woods tract, just east of SR-61, was timbered between 1999 and 2004 (PND	2005: several dozen burrows, including 30 deemed active, were recorded during a pre-development survey of the 700-acre Chason Woods tract (U05GEO01FLUS); burrows may have been recorded incidentally, not subject of intensive survey, so possibly many more.

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GOPHPOLY*1310	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	C	ST	2006-06-30	2011: still in national forest, though bordered on north by highway and urban area (Tallahassee). 2006-06-30: longleaf pine/turkey oak sandhill and transitional edge areas (PNDBAR09FLUS, PNDGIL06FLUS, U06GIL02FLUS). 1993-09-12: disturbed jeep trail wit	2006-06-30: area just south of Capital Circle: Gilbert and Barnett documented 99 gopher tortoise burrows, with > 75% active (PNDBAR09FLUS, PNDGIL06FLUS, U06GIL02FLUS). 1993-09-12: one active burrow (PNDPRI03FLUS). 1993-06-13: adult male observed feedin
GOPHPOLY*366	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	C	ST	1988-07-05	FORMER LONGLEAF PINE FOREST SUCCEEDING TO HAMMOCK FROM FIRE EXCLUSION. REMNANT WIREGRASS AND TURKEYOAK VERY RARE. POPULATION FOCUSED ALONG GRASSY SHOULDERS OF SAND ROAD.	A REMNANT POP. OF TORTOISES SURVIVING IN NOW MARGINAL HABITAT. HOWEVER, STILL MANY ACTIVE TORTOISES, PER- HAPS TWO DOZEN BURROWS OR MORE, SEVERAL LIVE ADULT TORTOISES SEEN JULY 1988, WITH SOCIAL INTERACTION, MAYBE FOOD--AND HABITAT--LIMITED.
GOPHPOLY*861	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	C	ST	1993-10-10	Second growth sandhill - longleaf, wiregrass, turkey oak, bracken fern.	3 active burrows, one with juvenile in mouth, and 1 inactive burrow.
HALILEUC*1687	*Haliaeetus leucocephalus*	Bald Eagle	G5	S3	N	N	2006	2005-07-12: Source does not provide a description.	Nest status: Active 2004, 2005, 2006 (W06FWC01FLUS). 2001: Nest status: Active, 2001, 2000, 1999; Not active, 2003, 2002;(U03FWC01FLUS)
HYDRWAKU*2	*Hydroptila wakulla*	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	2006-10-26	2006-10-26: No description given other than that it was near a river (U09RAS01FLUS). 1956-58: No description given (U06RAS01FLUS).	2006-10-26: Fourteen specimens were collected at the CR 61 bridge site using a 15 watt black light over an alcohol-filled white pan (U09RAS01FLUS, U08RAS01FLUS). 1956-58: An unknown number of specimens were collected from near the spring from 1945-10-23
LITHCAPI*186	*Lithobates capito*	Carolina Gopher Frog	G3	S3	N	SSC	1998-05-27	1998: depression marsh (ephemeral pond) in a limesink depression surrounded by 50-75-year old well managed longleaf pine/wire grass/turkey oak community; depression with abundant herbaceous growth, including broomsedge, club mosses, and sundew; depressio	1998-05-27: R. Means and D. B. Means study pond #21; one adult male found hiding under broomsedge in middle of recently dried; pond (U98MEA03FLUS).

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MACRTEMM*33	*Macrochelys temminckii*	Alligator Snapping Turtle	G3G4	S3	N	SSC	1980	VERY LARGE SPRING-RUN STREAM WITH ABUNDANT VEGETATION AND LOGS. RIVER EMANATES FROM FIRST MAGNITUDE SPRING WITH AVERAGE DISCHARGE OF 663 CUBIC M/MIN; AVERAGE WIDTH 150 M. VEGETATION INCLUDES OLD GROWTH BALD CYPRESS MID-CHANNEL, AND NUMEROUS SHRUBS AND VI	BRYAN OBSERVED LARGE SPECIMEN IN RIVER 1980-03-15, JUST UPSTREAM FROM MAIN FEEDING AREA. SPECIES APPEARS TO BE RARE HERE, OR PERHAPS SPORADIC.
MEGAYUCC*7	*Megathymus yuccae*	Yucca Skipper	G5	S3S4	N	N	2011-04-02	2011-04-02: The surrounding habitat is upland mixed forest, but this species was found in an open field that had been prescribed burned (F11JUE01FLUS).	2011-04-02: Two adults seen (F11JUE01FLUS). 2010-03-19: Larval tube found in yucca plant (F10JUE01FLUS).
MICRNOTI*27	*Micropterus notius*	Suwannee Bass	G3	S3	N	N	2002-05-02	2002-05-02: Collection made in spring run stream (G03WAL01FLUS).	2002-05-02: Five individuals caught in sampling effort, all vouchered with Florida Museum of Natural History ichthyology collection (G03WAL01FLUS).
NOTOPERS*35	*Notophthalmus perstriatus*	Striped Newt	G2G3	S2S3	C	N	1994-03-16	1994-03-16: depression ponds with intact vegetation. Surrounding uplands are quality sandhill - oaks, slash pines, longleaf pines and wiregrass (PNDMEA01FLUS).	1994-03-16: 2 adult females caught in 12 1-meter sweeps (PNDMEA01FLUS).
NOTOPERS*58	*Notophthalmus perstriatus*	Striped Newt	G2G3	S2S3	C	N	1967	1967: sandhill (U93FRA01FLUS).	1993-1994: pond where centroid is located surveyed several times, no N. perstriatus observed (PNDPRI03FLUS). 1967: specimen collected (U93FRA01FLUS).
PANDHALI*19	*Pandion haliaetus*	Osprey	G5	S3S4	N	SSC*	2007-04-17	1985: spring run stream and adjacent forest corridor. River emanates from first magnitude spring with average discharge of 663 cubic m/min; average width 150 meters vegetation includes old growth bald cypress mid-channel, and numerous shrubs and vines (	2007-04-17: several birds in vicinity of river, visible from river. Two active nests observed (PNDKIN02FLUS). 2005-1980s: mulitple breeding pairs and nests annually in state park portion of river. Contact FL Division of Recreation and Pa

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PANORUFA*1	*Panorpa rufa*	Red Scorpionfly	G2G3	S2	N	N	2012-01-21	Within a very large national forest. 2012-01-21: This area is mostly sandhill habitat with some depression marshes (UNDALM01FLUS, PNDALM02FLUS).	2012-01-21: Lukas and David Almquist found two females, one live and one freshly killed, in sandhill habitat along an unpaved bicycle trail (UNDALM01FLUS [includes photo], PNDALM02FLUS).
PITUMUGI*160	*Pituophis melanoleucus mugitus*	Florida Pine Snake	G4T3	S3	N	SSC	1991-06-02	No general description given	BAILEY FOUND 4 1/2 FT., DOR 6/2/91.
PSEUSUWA*1	*Pseudemys concinna suwanniensis*	Suwannee Cooter	G5T3	S3	N	SSC	2013-06-18	2007-03-29: very large spring-run stream with abundant vegetation and logs. River emanates from first magnitude spring with average discharge of 663 cubic M/MIN; average width 150 meters. Vegetation includes old growth bald cypress mid-channel, and num	2013 back to 1986: D. Jackson has observed species annually from boats along river within state park (PNDJAC01FLUS). 2011-06-09: G. Walker observed nesting female and dozens of depredated nests on service road bordering management zone WK-
PTOMSCHW*26	*Ptomaphagus schwarzi*	Schwarz' Pocket Gopher Ptomaphagus Beetle	G3	S3	N	N	1996-11-16 -- 1996-11-30	1996-11-30: No information given (U06SKE01FLUS).	1996-11-30: Four specimens were collected from 1996-11-09 to 1996-11-30, most likely in malt and dung-baited pitfall traps set in pocket gopher burrows (U06SKE01FLUS, A01PEC01FLUS).
SANDHILL*217	Sandhill		G3	S2	N	N	1995-11-29	Fire suppressed sandhill.	1995-11-29: Community characterized by typical components of longleaf pine, turkey oak, and wiregrass. Absence of fire (decades) has allowed hardwood encroachment and suppression of ground cover. Longleaf multi-aged, from grass stage to mature, though no
SCIUNIGE*102	*Sciurus niger niger*	Southeastern Fox Squirrel	G5T5	S3	N	N	1995-11-29	No general description given	1995-11-29: species reported to occur on-site; no idea of population size, but probably low (F95JAC03FLUS).
SINKLAKE*7	Sinkhole lake		G3	S3	N	N	1995-11-29	Karst depressions ranging from 20 m to 50 m across, in St. Marks limestone; blue, clear water; some with fishes.	1995-11-29: Several on-site (F95JAC03).
SPHOABBO*84	*Sphodros abboti*	Blue Purse-web Spider	G4G5	S4	N	N	2013-06-18	2013-06-18: state park surrounded by mostly forested, rural lands; mixed hardwood forest with some pines (PNDJAC01FLUS).	2013-06-18: D. Jackson observed single web at base of tree, showed spider to his kids; did not search for more (PNDJAC01FLUS).

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SPRISTRE*1	Spring-run stream		G2	S2	N	N	2007-04-17	2007: Within the physiographic province of Gulf Coastal Lowlands, in the Woodville Karst Plain, a region of gently rolling surface of porous sands overlying Oligocene and Miocene limestrones. The St. Marks Formation (Miocene limestone) is within the upp	2007-04-17: due to drought, the water is very clear. More clear than any time in the past 10 years (PNDKIN02FLUS, PNDSAV02FLUS). 2001: river flowing from several springs, primarily the Wakulla (first order magntitude). Abundant wildlife and aquatic anim
STENFLOR*69	*Stenacron floridense*	A Mayfly	G3G4	S3S4	N	N	2006-10-04	2006-10-04 : No description given (U09DEP01FLUS).	2006-10-04: This species was documented by Florida Department of Environmental Protection agency staff at three localities (U09DEP01FLUS).
UPLAFORE*10	Upland hardwood forest		G5	S3	N	N	2004	BEECH-MAGNOLIA FOREST, LOWER COASTAL PLAIN FLATWOODS UNDERLAIN BY LIMESTONE WITH THIN VENEER OF SAND.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1985-05-30) (U05FNA02FLUS). DOMINANT PLANTS WERE ACER BARBATUM, CARPINUS CAROLINIANA, CARYA GLABRA, FAGUS GRANDIFOLIA, ILEX OPACA AND LIQUIDAMBER STYRACIF
UPLAFORE*107	Upland hardwood forest		G5	S3	N	N	2001-02-11	2001-02-11: Narrow strip of mature hardwood forest totalling about 43 acres, bounded by swamp on the north, SR 61 on the west, a cleared area on the south, and the park entrance road on the east. [The hammock east of the park entrance road is recovering	2001-02-11: Mature hardwood forest along northern nature trail west of park entrance road, with trees up to 2 ft dbh and 60 ft tall. About 75 - 80% of canopy cover is made of deciduous species and the remainder by broadleaved evergreen trees. The 15-30 f
UPLAFORE*108	Upland hardwood forest		G5	S3	N	N	2002-02-03	2002-02-03: Large (138 acres) stand of hardwood forest appearing as a lighter signature on 1990 DOT aerial (3963-14-12) and occupying a gentle slope to the south, bounded on the north by north boundary road of state park, on the south by flooplain swamp,	2002-02-03: Hardwood forest with limestone outcropping at the surface in places and consisting of tall (60 ft, 0.5-1.5 dbh), widely spaced, primarily deciduous tree species in the canopy and scattered, primarily broadleaved evergreen trees and shrubs in

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UPLAFORE*109	Upland hardwood forest		G5	S3	N	N	2002-02-03	2002-02-03: Hardwood forest between dirt road that bends to east and the Wakulla River. Species that become more abundant on the edge of the floodplain swamp along the river include: Quercus michauxii, Arundinaria gigantea, Carpinus carolinaina, Quercus	2002-02-03: Wakulla Springs State park: Open canopy of widely spaced trees of 11 different species including a mixture of broadleaved evergreen and deciduous species; subcanopy of mostly evergreen species; sparse ground layer of Chasmanthium cf. sessilif
UPLAWOOD*44	Upland mixed woodland		G2	S2	N	N	2007-01-26	2007-01-26: small occurences along faint road between sandhill (longleaf pine , wiregrass) on uphill end and upland hardwood forest (beech, pignut hickory) on the downhill end- quite disturbed and none of the what would normally be a diverse herbaceous l	2007-01-26:small stands of red oak woods with canopies of deciduous hardwoods of drier sites including Quercus falcata, Carya alba, Liquidambar styraciflua, and Quercus margaretta; ground layer not diverse; see point source observations for details on ea
URSUFLOR*93	*Ursus americanus floridanus*	Florida Black Bear	G5T2	S2	N	ST*	2012	Area dominated by Apalachicola National Forest, a large area consisting of mesic and wet flatwoods, sandhill, and bay swamps (U05SIM01FLUS). The Chipola, Apalachicola, Ochlockonee, St. Marks, Aucilla, Econfina River, and a short stretch of the Steinhatch	2012: Estimated population of 438-695 individuals (U05SIM01FLUS); This EO represents the Primary and Secondary Bear Ranges for the Apalachicola Population. Primary is the FWC-designated core area that represents breeding range and contains documented ev
UTTEPEGG*9	*Utterbackia peggyae*	Florida Floater	G3	S3	N	N	2002-05-02	2002-05-02: Collected in spring run stream (G03WAL01FLUS).	2002-05-02: Six specimens collected (G03WAL01FLUS).

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Biodiversity Matrix Report

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Documented					
Floodplain swamp		G4	S4	N	N
Geological feature		GNR	SNR	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Sinkhole		G2	S2	N	N
Stenacron floridense	A Mayfly	G3G4	S3S4	N	N
Upland hardwood forest		G5	S3	N	N
Likely					
Alligator mississippiensis	American Alligator	G5	S4	SAT	FT(S/A)
Aramus guarauna	Limpkin		S3	N	SSC
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	FT
Hydroptila wakulla	Wakulla Springs Vari-colored Microca	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Micropterus notius	Suwannee Bass	G3	S3	N	N
Mycteria americana	Wood Stork	G4	S2	LE	FE
Pandion haliaetus	Osprey	G5	S3S4	N	SSC*
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	FE
Pseudemys concinna suwanniensis	Suwannee Cooter	G5T3	S3	N	SSC
Sandhill		G3	S2	N	N
Sciurus niger niger	Southeastern Fox Squirrel	G5T5	S3	N	N
Sinkhole lake		G3	S3	N	N
Spring-run stream		G2	S2	N	N
Trichechus manatus	Manatee		S2	LE	FE
Upland pine		G3	S2	N	N
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	ST*
Utterbackia peggyae	Florida Floater	G3	S3	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Ambystoma cingulatum	Frosted Flatwoods Salamander	G2	S2	LT	FT
Ameiurus serracanthus	Spotted Bullhead	G3	S3	N	N
Andropogon arctatus	Pine-woods Bluestem		S3	N	LT
Aquatic cave			S3	N	N
Asclepias viridula	Southern Milkweed	G2	S2	N	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	SSC
Bird Rookery		G5	SNR	N	N
Carex baltzellii	Baltzell's Sedge	G3	S3	N	LT
Carex chapmanii	Chapman's Sedge		S3	N	LT
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Crangonyx grandimanus	Florida Cave Amphipod	G2G3	S2S3	N	N
Crangonyx hobbsi	Hobbs' Cave Amphipod		S2S3	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gentiana pennelliana	Wiregrass Gentian	G3	S3	N	LE
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Leitneria floridana	Corkwood	G3	S3	N	LT
Lithobates capito	Carolina Gopher Frog		S3	N	SSC
Litsea aestivalis	Pondspice	G3?	S2	N	LE
Macrochelys temminckii	Alligator Snapping Turtle	G3G4	S3	N	SSC
Magnolia ashei	Ashe's Magnolia	G2	S2	N	LE

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Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
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Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Neovison vison halilimnetes	Gulf Salt Marsh Mink	G5T3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	C	N
Oxypolis greenmanii	Giant Water-dropwort	G3	S3	N	LE
Peucaea aestivalis	Bachman's Sparrow		S3	N	N
Phoebanthus tenuifolius	Narrow-leaved Phoebanthus		S3	N	LT
Phyllanthus liebmannianus ssp. platylepis	Pinewoods Dainties	G4T2	S2	N	LE
Physostegia godfreyi	Apalachicola Dragon-head	G3	S3	N	LT
Pinguicula primuliflora	Primrose-flowered Butterwort	G3G4	S3	N	LE
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	SSC
Pityopsis flexuosa	Zigzag Silkgrass	G3	S3	N	LE
Platanthera integra	Yellow Fringeless Orchid	G3G4	S3	N	LE
Procambarus horsti	Big Blue Spring Cave Crayfish	G1	S1	N	N
Procambarus orcinus	Woodville Karst Cave Crayfish		S1	N	N
Rhexia parviflora	Small-flowered Meadowbeauty	G2	S2	N	LE
Rhexia salicifolia	Panhandle Meadowbeauty		S2	N	LT
Ruellia noctiflora	Nightflowering Wild Petunia		S2	N	LE
Salix floridana	Florida Willow		S2	N	LE
Sarracenia leucophylla	White-top Pitcherplant	G3	S3	N	LE
Stachydeoma graveolens	Mock Pennyroyal	G2G3	S2S3	N	LE
Xyris longisepala	Karst Pond Xyris		S2S3	N	LE
Xyris scabrifolia	Harper's Yellow-eyed Grass	G3	S3	N	LT

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Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
GNR = Element not yet ranked (temporary).
GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).
S5 = Demonstrably secure in Florida.
SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
SX = Believed to be extirpated throughout Florida.
SU = Unrankable; due to a lack of information no rank or range can be assigned.
SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
SNR = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
LE = Endangered: species in danger of extinction throughout all or a significant portion of its range.
LE, LT = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
LE, PDL = Species currently listed endangered but has been proposed for delisting.
LE, PT = Species currently listed endangered but has been proposed for listing as threatened.
LE, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
LT = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
F(XN) = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future. (ST* for Ursus americanus floridanus (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for Neovison vison pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* indicates that a species has SSC status only in selected portions of its range in Florida. SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: http://www.doacs.state.fl.us/pi/.

LE = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
LT = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

Exhibit O

Florida Fish and Wildlife Conservation Commission Response

Florida Fish and Wildlife Conservation Commission

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Kathy Barco
Chairman
Jacksonville

Kenneth W. Wright
Vice Chairman
Winter Park

Ronald M. Bergeron
Fort Lauderdale

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Nick Wiley
Executive Director

Greg Holder
Assistant Executive Director

Karen Ventimiglia
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Fish and Wildlife Research Institute
Gil McRae
Director

(727) 896-8626
(727) 823-0166 FAX

FWRI
Information Sciences and Management

(850) 488-0588
(850) 410-5269 (FAX)

Managing fish and wildlife resources for their long-term well-being and the benefit of people.

Fish and Wildlife Research Institute
620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: (850) 410-0656

Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)

MyFWC.com/Research

June 6, 2014

Ms. Jennifer Reed
Land Planning Coordinator
Department of Agriculture and Consumers Services
Florida Forest Service
3125 Conner Boulevard
Tallahassee, FL 32399-1650

Dear Ms. Reed:

This letter is in response to your request for listed species occurrence records and critical habitats for your project (Wakulla State Forest) located in Wakulla County, Florida. Records from The Florida Fish and Wildlife Conservation Commission's database indicate that listed species occurrence data are located within project area. Enclosed are 8.5 x 11 maps showing listed species locations, black bear range, SHCA for Cooper's hawk, striped newt and swallow-tailed kite, Prioritized SHCA's, species richness, priority wetlands for listed species, and land cover for the project site and surrounding area.

This letter and attachments should not be considered as a review or an assessment of the impact upon threatened or endangered species of the project site. It provides FWC's most current data regarding the location of listed species and their associated habitats.

Our SHCA recommendations are intended to be used as a guide. Land development and ownership in Florida is ever-changing and priority areas identified as SHCA might already have been significantly altered due to development or acquired into public ownership. Onsite surveys, literature reviews, and coordination with FWC biologists remain essential steps in documenting the presence or absence of rare and imperiled species and habitats within the project area.

Our fish and wildlife location data represents only those occurrences recorded by FWC staff and other affiliated researchers. It is important to understand that our database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species, such as gopher tortoises, are not entered into our database on a site-specific basis. **Therefore, one should not assume that an absence of occurrences in our database indicates that species of significance do not occur in the area.**

The Florida Natural Areas Inventory (FNAI) maintains a separate database of listed plant and wildlife species, please contact FNAI directly for specific information on the location of element occurrences within the project area.

Because FNAI is funded to provide information to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (http://www.fnai.org).

Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or gisrequests@myfwc.com.

Sincerely,

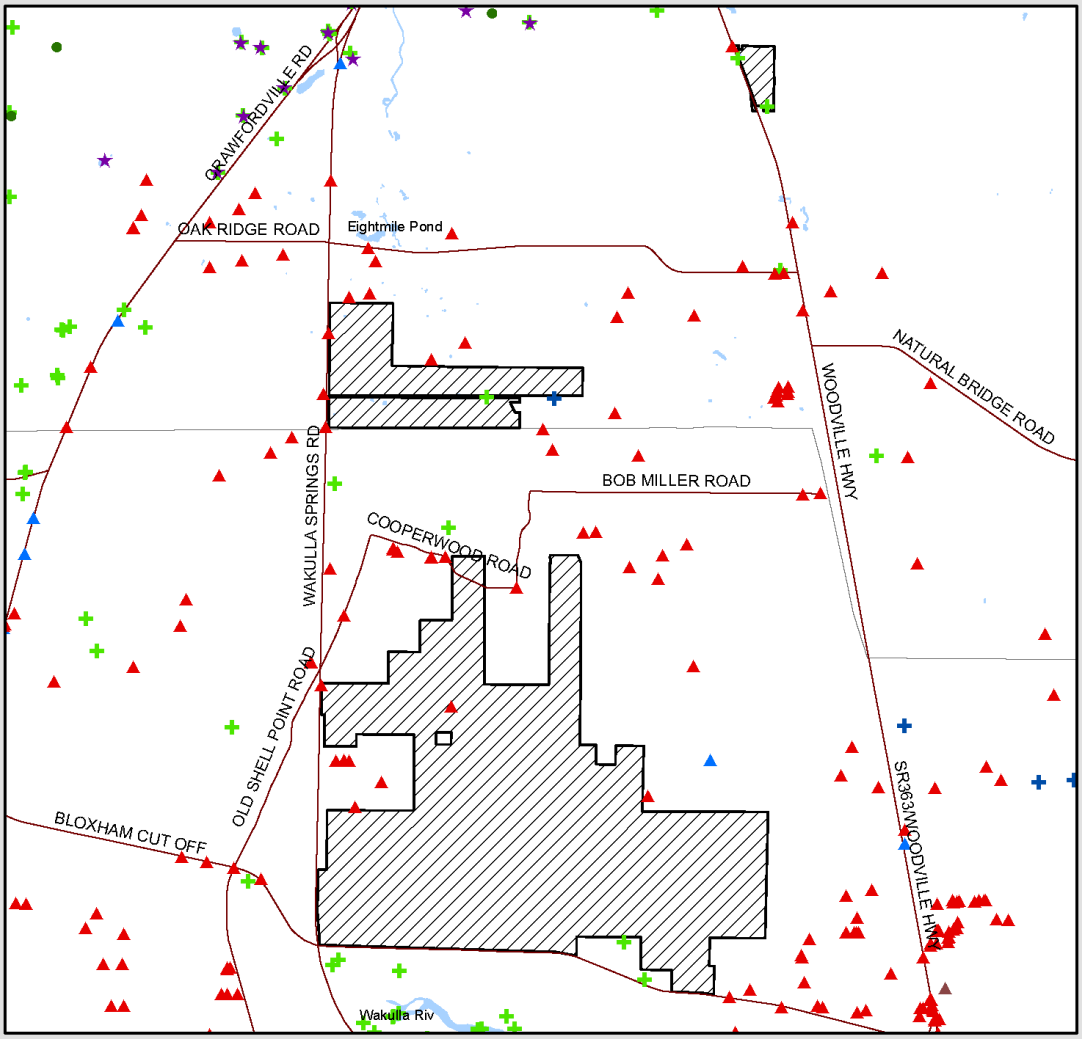
Jan Stearns

Jan Stearns
Staff Assistant

js
2014_6007
Enclosures

Species Occurrence

Wakulla State Forest



- Striped Newt
- Red Cockaded Woodpecker
- Bear Calls
- Bear Roadkill
- Black Bear Telemetry
- Florida Natural Inventory Areas
- Wildlife Observations
- County Boundary
- Project Site

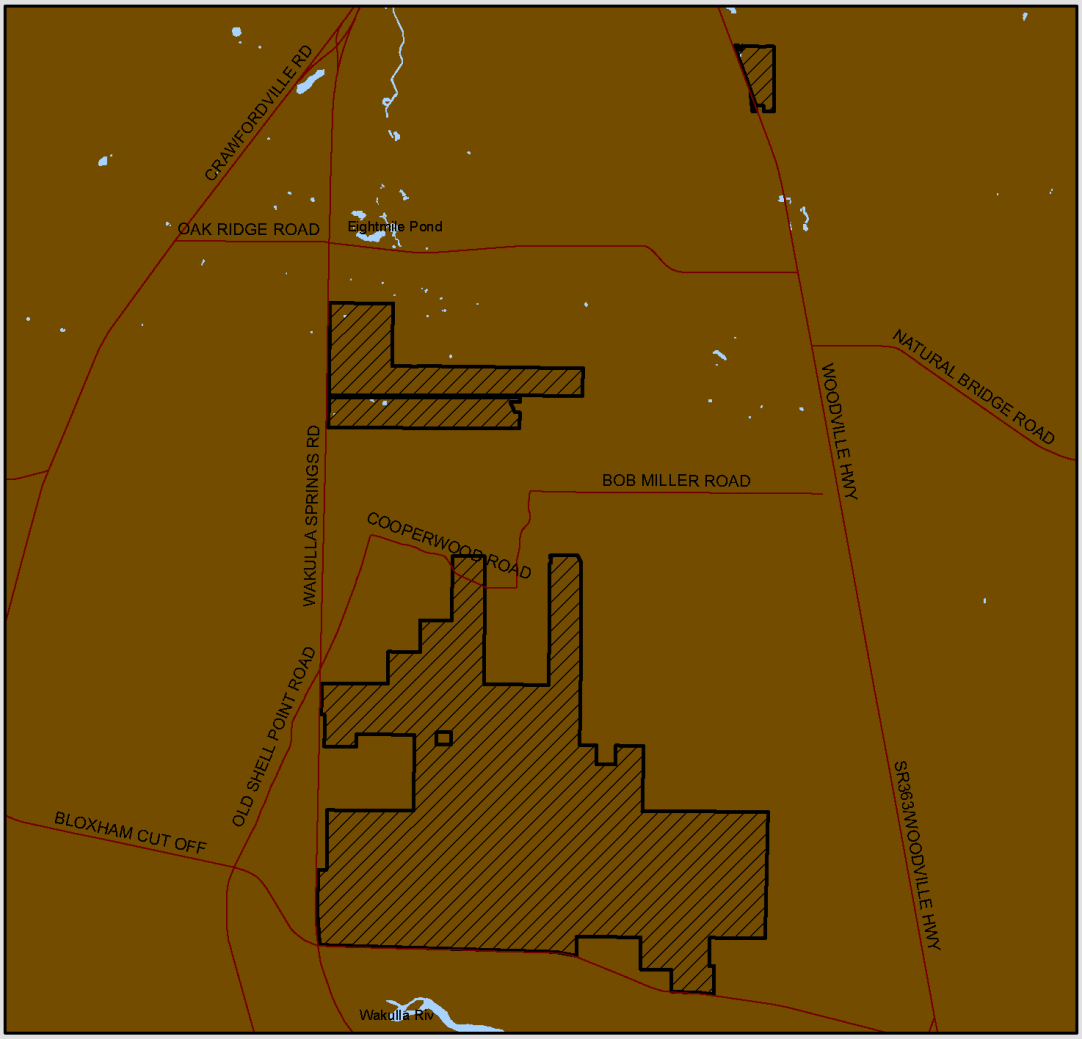
Miles
0 0.5 1 1.5

N

2014_6007

Black Bear Range

Wakulla State Forest



Bear Range 2008
RangeType
Primary
Secondary
County Boundary
Project Site

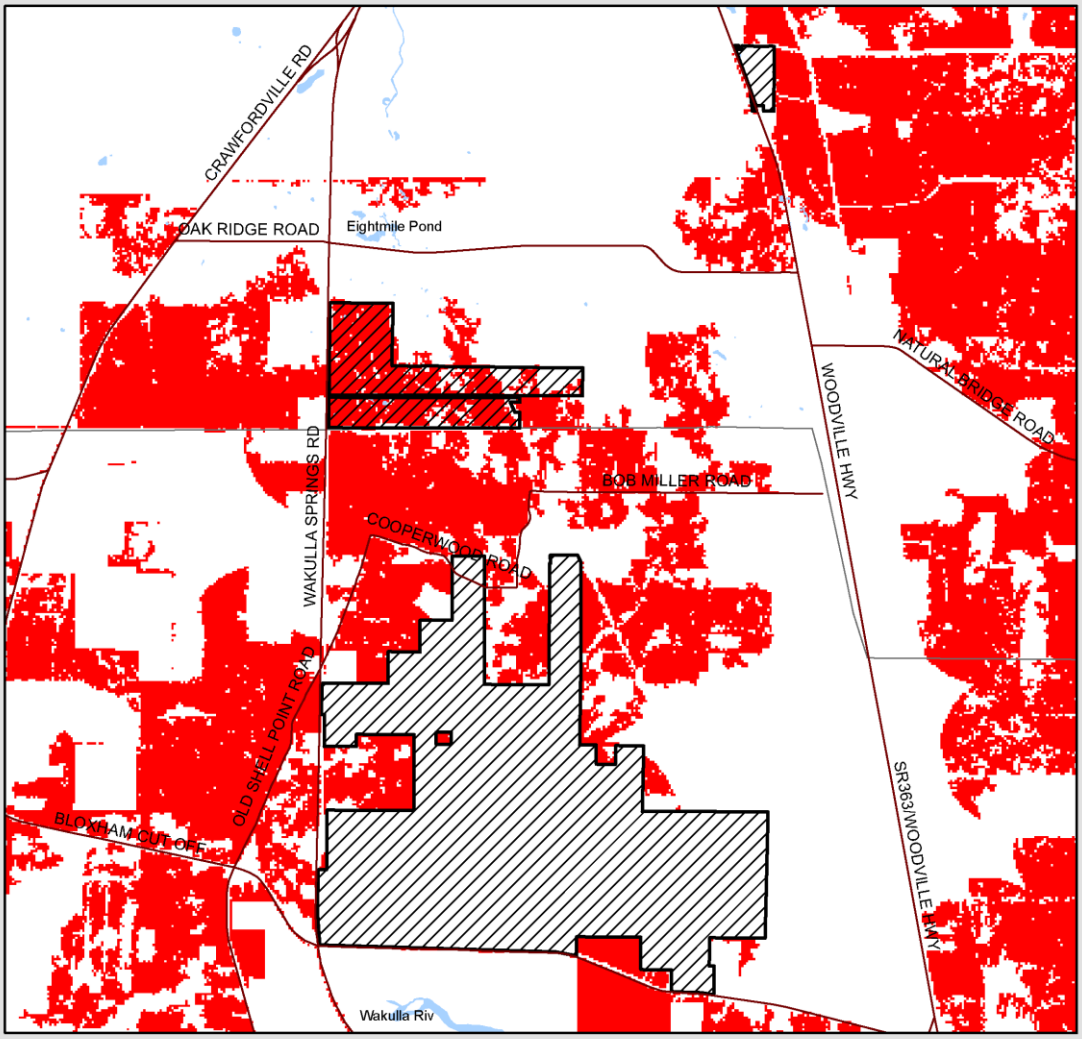
Miles
0 0.5 1 1.5

N

2014_6007

Strategic Habitat Conservation Areas

Wakulla State Forest



Strategic Habitat Conservation Areas
County Boundary
Project Site

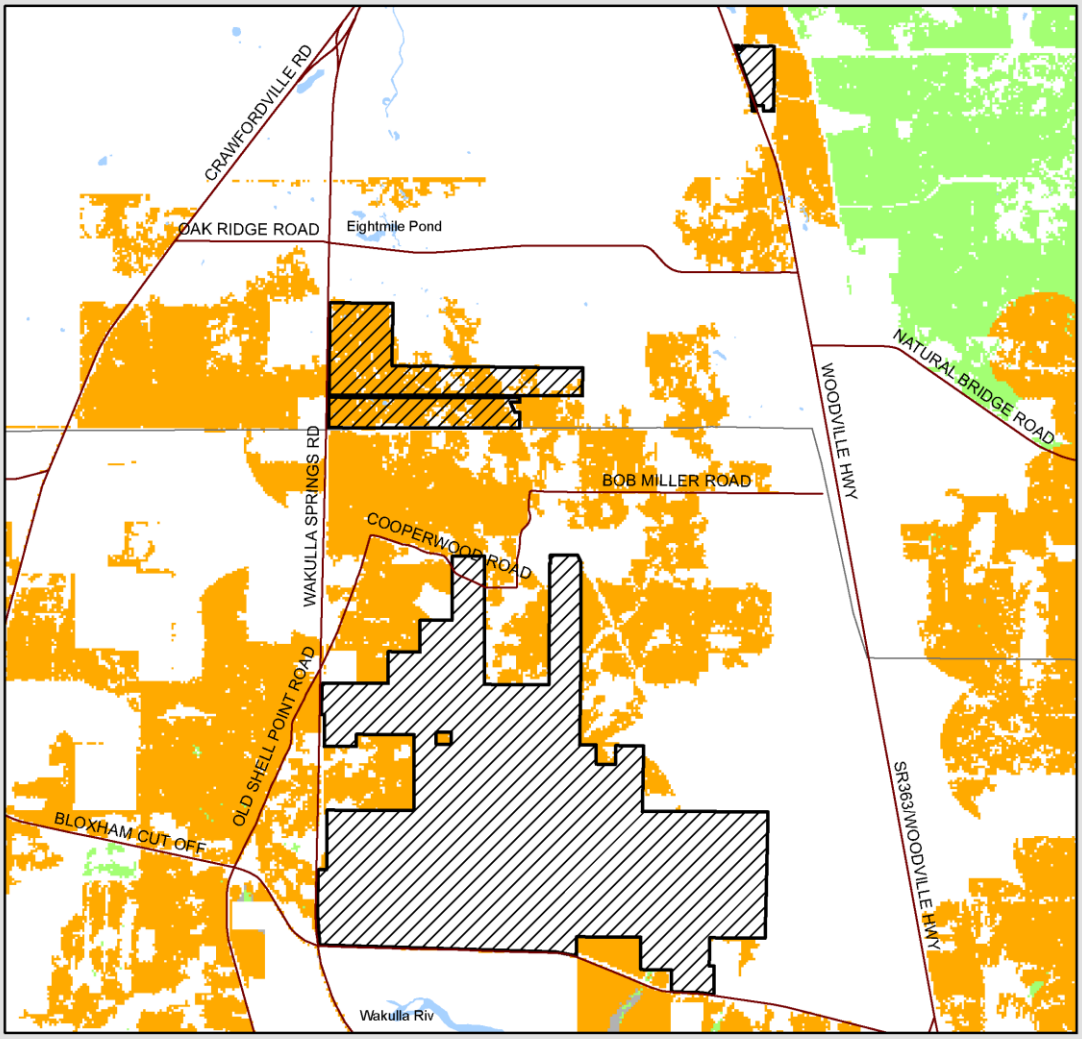
Miles
0 0.5 1 1.5

N

2014_6007

Prioritized SHCA's

Wakulla State Forest



Prioritized SHCA's
- Priority 1
- Priority 2
- Priority 3
- Priority 4
- Priority 5

County Boundary
Project Site

Miles
0 0.5 1 1.5

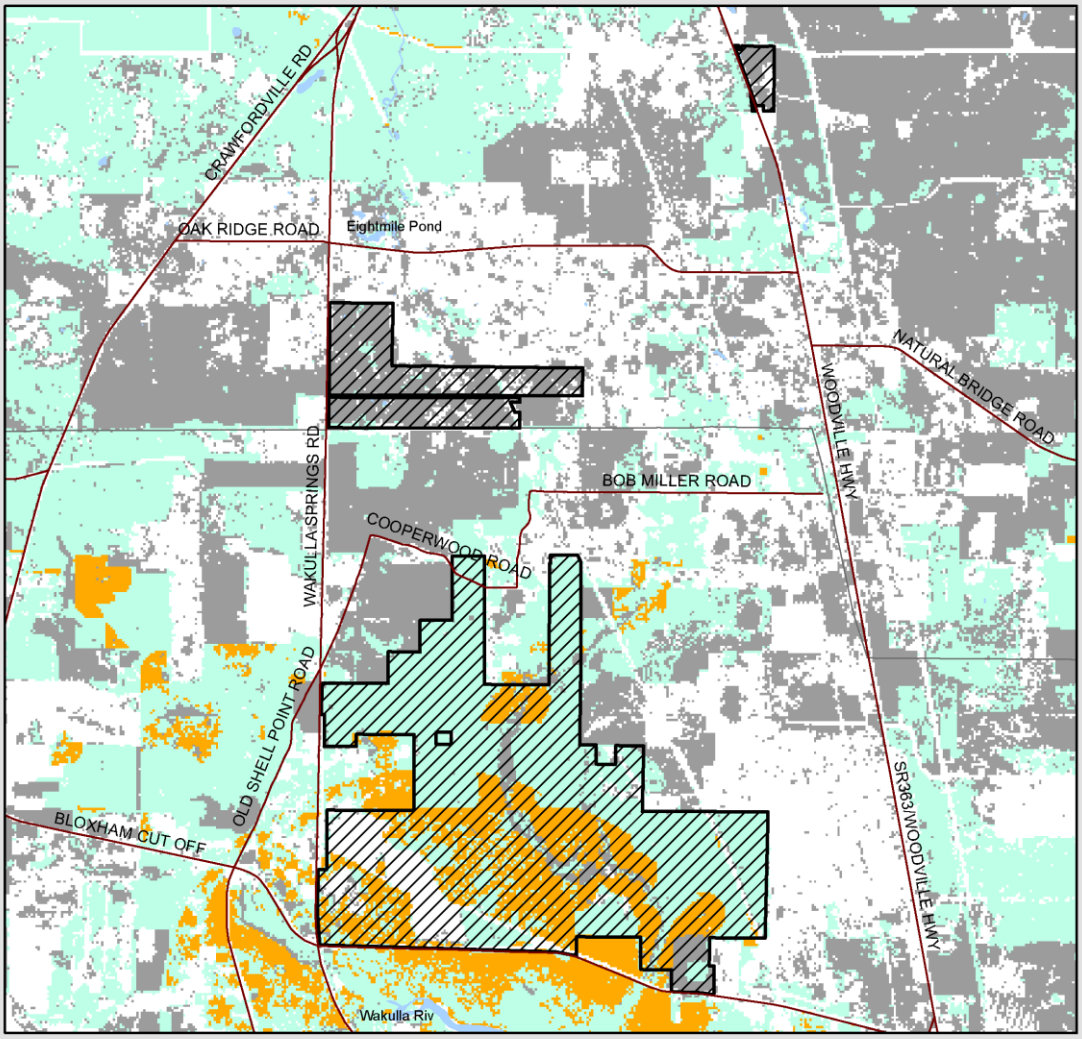
N

The prioritized SHCA map identifies 5 classes of SHCA based upon Heritage ranking criteria developed by The Nature Conservancy, the Natural Heritage Program Network, and the Florida Natural Areas Inventory. There are 2 possible ranks used to prioritize a species' SHCA: 1) the global rank based on a species worldwide status, and 2) the state rank based upon the species status in Florida. The state and global ranks are based upon many factors such as known occurrence locations, estimated abundance, range, amount of habitat currently protected, perceived levels of threats towards the species, and ecological fragility.

2014_6007

Species Richness

Wakulla State Forest



Species Richness
- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 13

County Boundary
Project Site

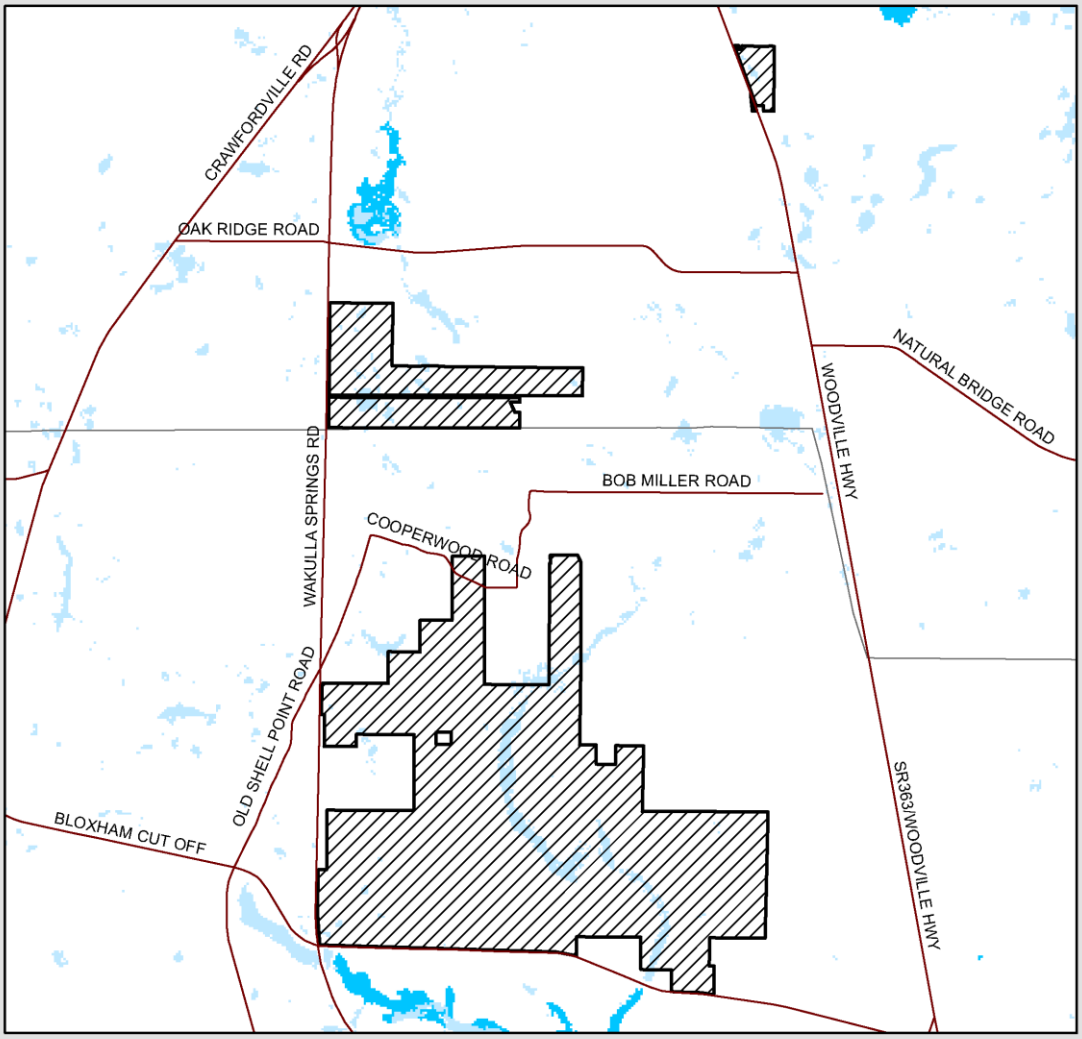
Miles
0 0.5 1 1.5

N

2014_6007

Priority Wetlands

Wakulla State Forest



Priority Wetlands
- 1-3 Species, Wetlands habitat
- 4-6 Species, Wetlands habitat
- 7-9 Species, Wetlands habitat
- 10-11 Species, Wetlands habitat

County Boundary
Project Site

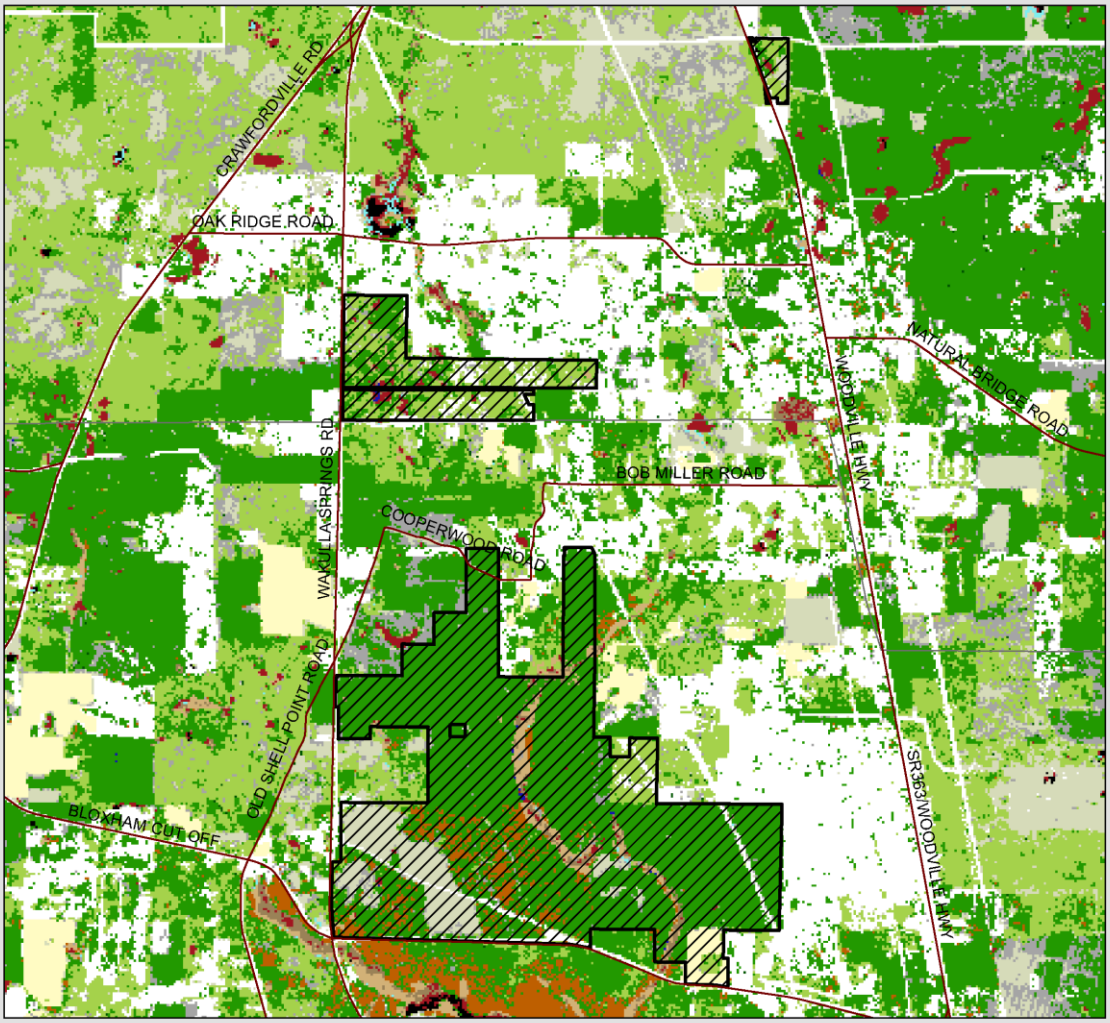
Miles
0 0.5 1 1.5

N

2014_6007

Florida Land Cover - 2003

Wakulla State Forest



Project Site
Major Roads
County Boundary

Coastal Strand
Sand/Beach
Xeric Oak Scrub
Sand Pine Scrub
Sandhill
Dry Prairie
Mixed Pine-Hardwood Forest
Hardwood Hammocks and Forest
Pinelands
Cabbage Palm-Live Oak Hammock
Tropical Hardwood Hammock
Freshwater Marsh and Wet Prairie
Sawgrass Marsh

Cattail Marsh
Shrub Swamp
Bay Swamp
Cypress Swamp
Cypress/Pine/Cabbage Palm
Mixed Wetland Forest
Hardwood Swamp
Hydric Hammock
Bottomland Hardwood Forest
Salt Marsh
Mangrove Swamp
Scrub Mangrove

Tidal Flat
Open Water
Shrub and Brushland
Grassland
Bare Soil/Clearcut
Improved Pasture
Unimproved Pasture
Other Agriculture
Citrus
Exotic Plants
High and Low Impact Urban
Extractive

Miles
0 0.5 1 1.5

N

2014_6007

Exhibit P

Fire History

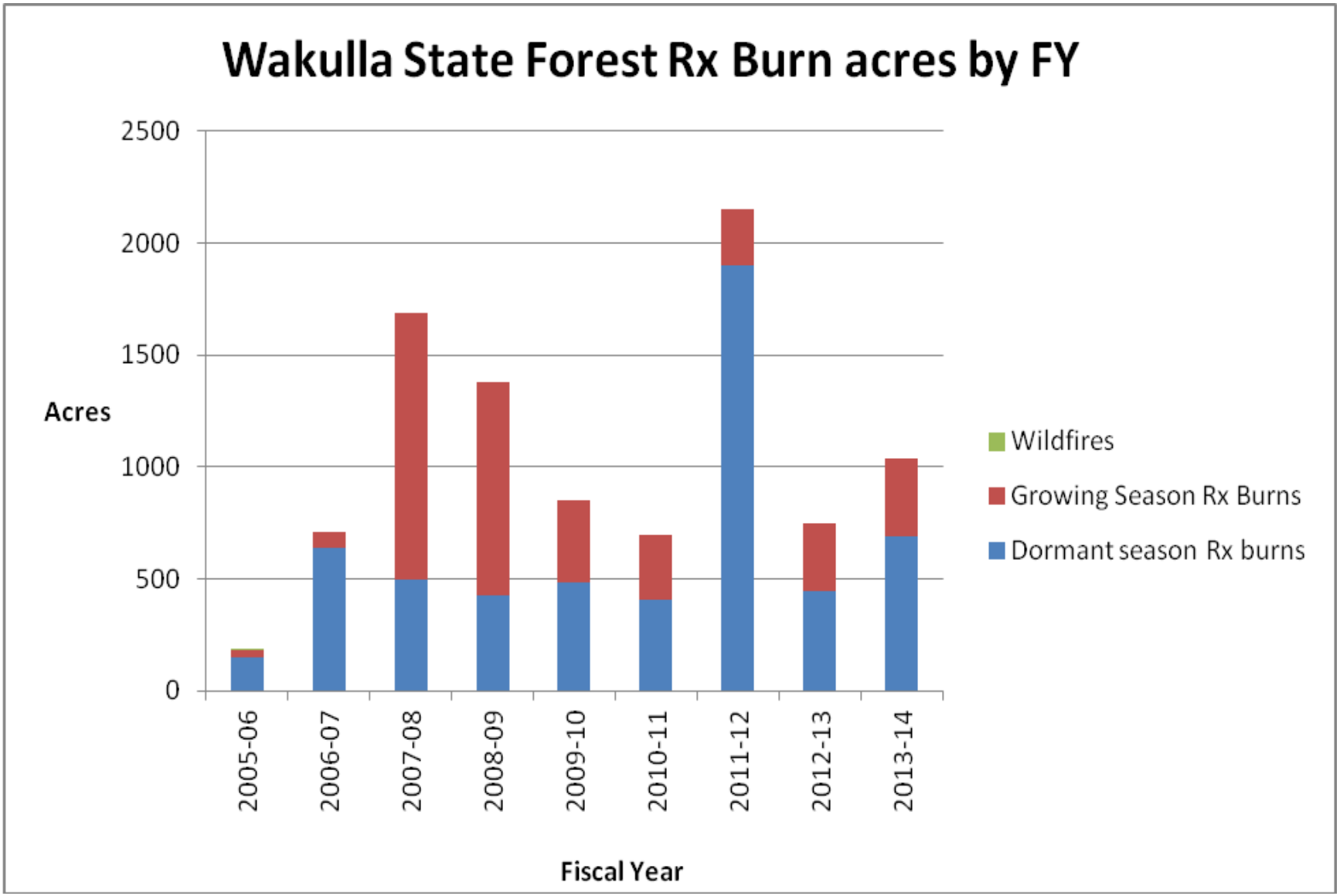

Wakulla State Forest Rx Burn acres by FY
2500
2000
1500
1000
500
0
Acres
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
Fiscal Year
Wildfires
Growing Season Rx Burns
Dormant season Rx burns

Exhibit Q

Non-Native Invasive Species

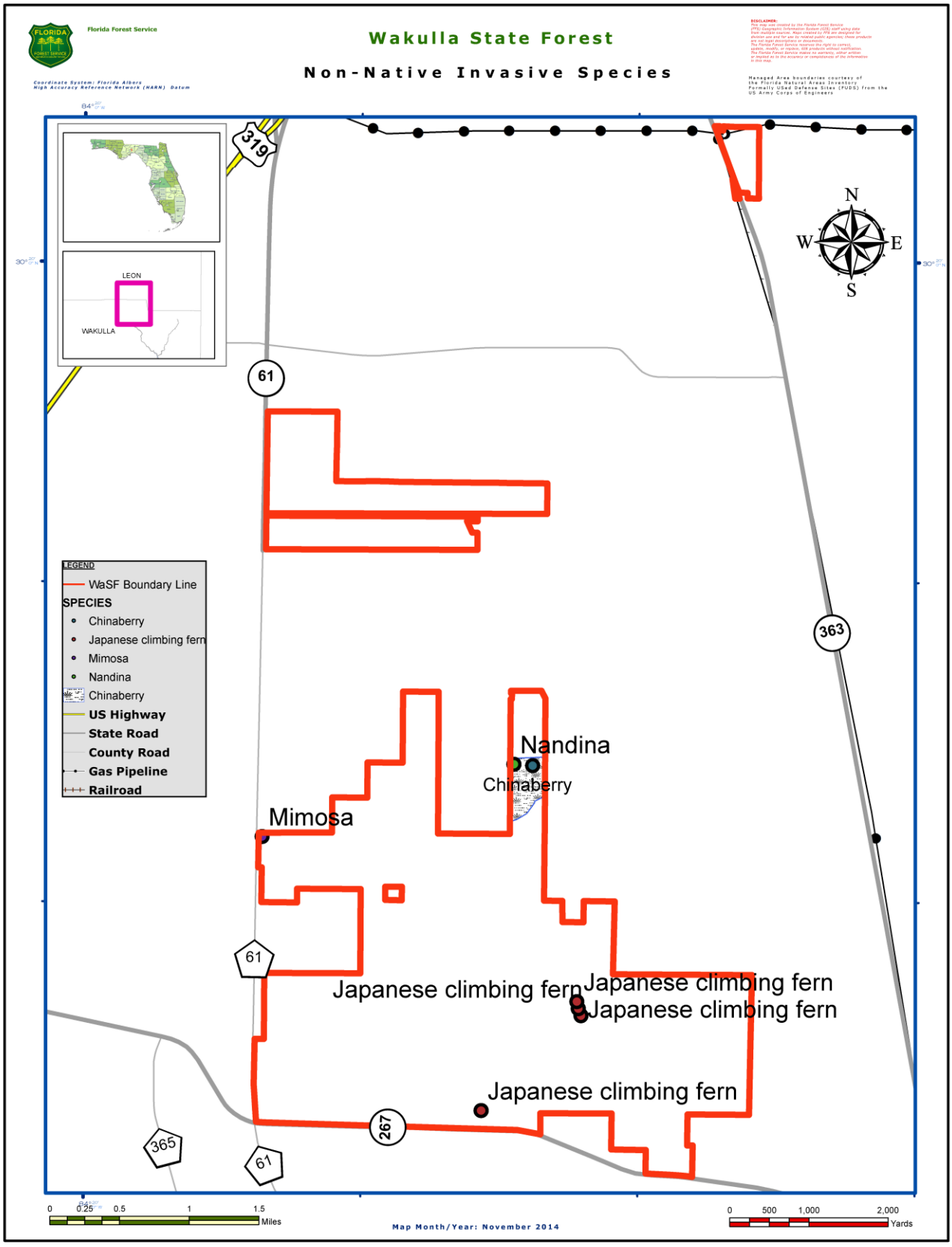

Florida Forest Service
Wakulla State Forest
Non-Native Invasive Species
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
DISCLAIMER:
Managed Area boundaries courtesy of the Florida Natural Areas Inventory
Formally USed Defense Sites (FUDS) from the US Army Corps of Engineers
LEON
WAKULLA
N
W
E
S
319
61
363
267
365
LEGEND
WaSF Boundary Line
SPECIES
Chinaberry
Japanese climbing fern
Mimosa
Nandina
Chinaberry
US Highway
State Road
County Road
Gas Pipeline
Railroad
Nandina
Chinaberry
Mimosa
Japanese climbing fern
Japanese climbing fern
Japanese climbing fern
Japanese climbing fern
0 0.25 0.5 1 1.5
Miles
0 500 1,000 2,000
Yards
Map Month/Year: November 2014

Exhibit R

Current Natural Communities

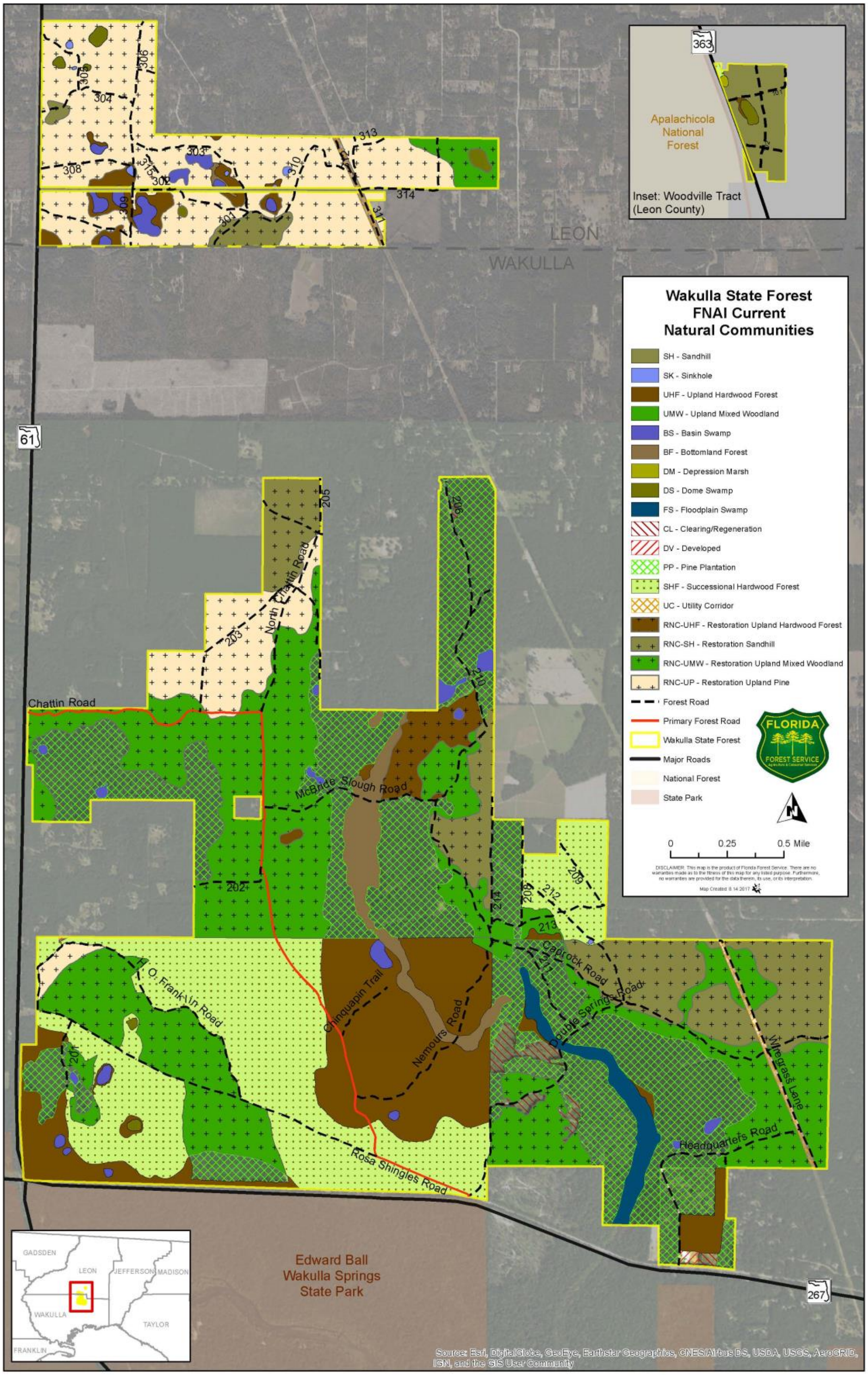

Wakulla State Forest
FNAI Current
Natural Communities
SH - Sandhill
SK - Sinkhole
UHF - Upland Hardwood Forest
UMW - Upland Mixed Woodland
BS - Basin Swamp
BF - Bottomland Forest
DM - Depression Marsh
DS - Dome Swamp
FS - Floodplain Swamp
CL - Clearing/Regeneration
DV - Developed
PP - Pine Plantation
SHF - Successional Hardwood Forest
UC - Utility Corridor
RNC-UHF - Restoration Upland Hardwood Forest
RNC-SH - Restoration Sandhill
RNC-UMW - Restoration Upland Mixed Woodland
RNC-UP - Restoration Upland Pine
Forest Road
Primary Forest Road
Wakulla State Forest
Major Roads
National Forest
State Park
FLORIDA
FOREST SERVICE
0
0.25
0.5 Mile
Inset: Woodville Tract
(Leon County)
Apalachicola
National
Forest
363
LEON
WAKULLA
61
267
Chattin Road
North Chattin Road
McBride Slough Road
O. Franklin Road
Chinquapin Trail
Nemours Road
Rosa Shingles Road
Caprock Road
Double Springs Road
Wiregrass Lane
Headquarters Road
Edward Ball
Wakulla Springs
State Park
GADSDEN
LEON
JEFFERSON
MADISON
WAKULLA
TAYLOR
FRANKLIN
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Exhibit S

Historic Natural Communities

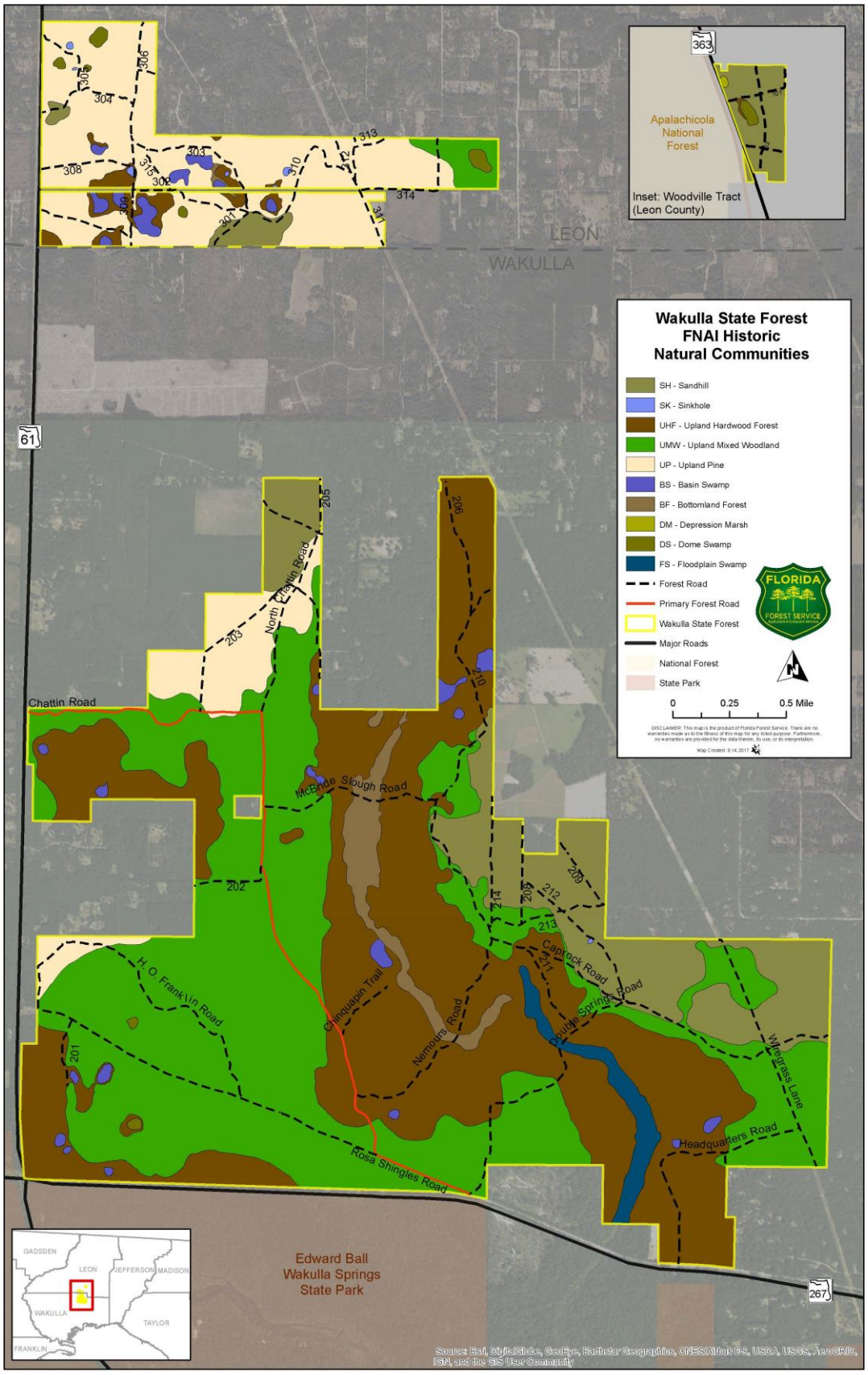

Wakulla State Forest
FNAI Historic
Natural Communities
SH - Sandhill
SK - Sinkhole
UHF - Upland Hardwood Forest
UMW - Upland Mixed Woodland
UP - Upland Pine
BS - Basin Swamp
BF - Bottomland Forest
DM - Depression Marsh
DS - Dome Swamp
FS - Floodplain Swamp
Forest Road
Primary Forest Road
Wakulla State Forest
Major Roads
National Forest
State Park
0
0.25
0.5 Mile
FLORIDA
FOREST SERVICE
Inset: Woodville Tract
(Leon County)
Apalachicola
National
Forest
363
LEON
WAKULLA
61
267
Chattin Road
North Chattin Road
McBride Slough Road
H. O. Franklin Road
Chinquapin Trail
Nemours Road
Caprock Road
Bridle Springs Road
Wiregrass Lane
Headquarters Road
Rosa Shingles Road
Edward Ball
Wakulla Springs
State Park
GADSDEN
LEON
JEFFERSON
MADISON
WAKULLA
TAYLOR
FRANKLIN
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Exhibit T

Management Prospectus

Wakulla Springs Protection Zone

Wakulla and Leon Counties

Partnerships

Purpose for State Acquisition

Just south of Tallahassee, Wakulla Springs - one of the largest and deepest artesian springs in the world - is now protected by a state park, but the enormous caverns that feed the spring spread far to the north and west of the park. The Wakulla Springs Protection Zone will protect the spring by protecting the land above the conduits that feed it, connect the state park with the Apalachicola National Forest, and provide the public an area for camping, hiking, and hunting.

Managers

Division of Recreation and Parks (DRP), Florida Department of Environmental Protection (FDEP); Florida Forest Service/FFS (aka Division of Forestry/DOF), Department of Agriculture and Consumer Services; and the Fish and Wildlife Conservation Commission (FWCC). See Management Prospectus for areas of management.

General Description

Over 70 percent of the project is in intensive silviculture or pasture; remnant natural areas include floodplain swamps and forests, upland pine or upland mixed forests, and unique features like sinkholes, aquatic caves, and spring-run streams. The project is important to protecting the subterranean headwaters of Wakulla Springs, the state's largest first magnitude spring and source of the Wakulla River. It is one of the largest and deepest artesian springs in the world and an Outstanding Florida Water. At least five rare animals, including three crustaceans in the aquatic caves, have been found here. Eight archaeological sites, including four mounds, are known from the site, and more can be expected. There is also a historic cemetery in the project. The sinkholes in the project are vulnerable to trash dumping and development, which may degrade the quality of water flowing into Wakulla Spring; endangerment of the area is moderate.

Wakulla Springs Protection Zone
FNAI Elements

Florida Black Bear	G5T2/S2
Gopher Tortoise	G3/S3
Woodville Karst Cave Crayfish	G1/S1
Florida Cave Amphipod	G2G3/S2S3
Hobbs' Cave Amphipod	G2G3/S2S3
Suwannee Cooter	G5T3/S3
Florida Pine Snake	G4T3/S3
Southeastern Fox Squirrel	G5T5/S3

9 rare species are associated with the project

Public Use

Portions of the project qualify as state park, state forest, and wildlife management area. Hiking or bicycling trails could link the park with the Apalachicola National Forest, and the project could also be suitable for camping, horseback riding, and perhaps hunting.

Acquisition Planning

On 12/5/1996 the Land Acquisition Advisory Council (LAAC) added the Wakulla Springs Protection Zone project to the 1997 CARL priority list. This fee-simple acquisition, sponsored by the DRP, consisted of approximately 10,243 acres, multiple owners and a 1995 taxable value of $7,151,888.

The essential parcels are the Ferrell tract, McBrides Slough tract and smaller tracts between the Edward Ball—Wakulla Springs State Park and Ferrell Tract. The McBrides Slough tract has been mapped previously as a DRP Inholdings and Additions project.

On 10/15/1998, the LAMAC revised the designation of the following area to essential: approximately 1,004 acres that would connect the Ferrell tract with the Apalachicola National Forest.

Placed on List	**1997**
Project Area (GIS Acres)	**7,421**
Acres Acquired (GIS)	**3,452**
at a Cost of	**$7,372,678**
Acres Remaining (GIS)	**3,969**
with Estimated (Tax Assessed) Value of	**$7,372,678**

Wakulla Springs Protection Zone

In 12/1999 the St. Joe Timberland FF project was created. Approximately 3,702 acres were transferred from this project into the St. Joe project.

On 10/25/2001 the Acquisition and Restoration Council (ARC) approved a fee-simple 59-acre addition to the project boundaries. The addition, sponsored by the Office of Environmental Services (OES), consisted of multiple owners and a 2001 taxable value of $146,181. The Stansbury Sink is located within this addition.

On 6/9/2006, the ARC approved a fee-simple, 152-acre addition to the project boundary. It was sponsored by the FDEP, Florida Springs Initiative, consisted of seven owners, and a 2005 taxable value of $94,268. One owner, Linderand, Inc., already holds title to property within the current project boundary. These parcels were designated as essential since they are important to the future water quality of Wakulla Springs. FDEP is recommended manager of the addition.

On 12/14/2007 the ARC approved a fee-simple 700-acre one-parcel addition, known as Chason Woods, to the project boundary. It was sponsored by Jerry Parrish Realty and owned by one landowner, with a taxable value of $1,392,980. The FFS agreed to manage the parcel. Originally this parcel was not identified as essential, and required matching funds for acquisition.

On 12/12/2008 ARC approved a request to identify the Chason Woods parcel as an essential parcel.

Coordination

The Nature Conservancy (TNC), DRP, the Trust for Public Lands (TPL) are acquisition partners for this project.

Management Policy Statement

The primary objective of management of the Wakulla Springs Protection Zone project is to preserve the water quality of Wakulla Springs by protecting the land above the underground conduits that supply the spring. Achieving this objective will provide a refuge for extremely rare cave-dwelling crustaceans, preserve wildlife habitat in this developing region, and provide various recreational opportunities, such as camping and hiking, to the public.

Management activities should be directed toward the protection of surface-water and groundwater quality. Managers should control public access to the project; limit public motor vehicles to one or a few major roads and route them away from sinkholes; thoroughly inventory the resources; and monitor management activities to ensure that they are actually preserving the quality of the groundwater. Managers should limit the number and size of recreational facilities, such as hiking trails, ensure that they avoid the most sensitive resources, particularly sinkholes and spring runs, and site them in already disturbed areas when possible.

If less than fee purchases are made within the project, any activities, such as silviculture, road improvements, or any development, should be strictly monitored to ensure that surface-water and groundwater quality in the project area is maintained or improved.

For areas managed by FFS, the primary land management goal is to restore, maintain and protect in perpetuity all native ecosystems; to integrate compatible human use, and to insure long-term viability of populations and species considered rare. This ecosystem approach will guide the FFS's management activities on this project.

For areas managed by FWCC, priority will be given to the conservation and protection of environmentally unique native habitats and threatened and endangered species. Under FWCC management, the tract will also provide opportunities for hunting, fishing, wildlife observation, hiking, and other natural resource-based recreational activities.

Management Prospectus

Qualifications for state designation Its unique subterranean resources connected with Wakulla Springs, one of Florida's most significant artesian springs and already managed as a state park, qualify this project as a unit of the state park system. The project's size and diversity of resources makes portions of it also desirable for use and management as a state forest and a wildlife management area. Management by the FFS as a state forest is contingent upon the state acquiring fee-simple title to the core parcels.

Manager The DRP will manage areas south of State Road 267 and west of State Road 61, except for that portion of the Ferrell property in sections 22 and 27, T2S, R1W, consisting of approximately 120 acres of agricultural fields and the 152-acre boundary addition. The FWC is recommended as lead manager for the 120-acre portion of the Ferrell property described above. The FFS is recommended as lead manager for the remainder of the project.

Conditions affecting intensity of management

A. Division of Recreation and Parks

Under fee title acquisition, the Wakulla Springs Protection Zone will be a high-need management area. Resource restoration, public recreation, environmental

education and development compatible with long-term resource protection will be an integral aspect of management. The areas around karst windows, springs and associated sloughs are often, and in some cases currently are being, subjected to inappropriate uses and levels of use that degrade the resource. In particular, the lands between the park and the national forest, west of State Road 61, contain a significant number of hydrological features which will require intensive management of people to ensure against resource degradation by users and allow for restoration where needed. Springs, karst windows and sinks are popular recreation sites. Hence, there will be a demand for their use. Close monitoring and study will be needed to decide which are suitable for public use and at what levels, followed with appropriate management measures.

The Ferrell Property represents a relatively intact long-leaf pine/wire grass community. Land uses in the general area have severely impacted this community type. Close attention will need to be paid to ensure the perpetuation of this community through appropriate burning and other management practices, if acquired in fee title. This concept also applies to other areas of the project managed by the DRP where the natural regime has been disturbed by silviculture and other land uses.

B. Florida Forest Service

Many areas of the project will require considerable restoration efforts. Until these efforts are completed, the level of management intensity and related management costs is expected to be somewhat higher than what would be expected on a typical state forest.

C. Fish and Wildlife Conservation Commission

The proposal generally includes lands that are low-need tracts requiring basic resource management, including the frequent use of prescribed fire. The primary management needed for perpetuation of the natural communities on the area is the introduction of all-season prescribed fire and control of human access. On portions of existing disturbed areas such as the agricultural fields, native and non-native agronomic plantings will be used to benefit both game and non-game wildlife on the area and to promote special hunting and wildlife viewing opportunities for the general public. Development of facilities, as on all wildlife management areas, would be kept to the minimum level to assure a high-quality recreational experience for those members of the public interested in less infrastructure and other disturbance factors.

Timetable for implementing management and provisions for security and protection of infrastructure

A. Division of Recreation and Parks

Upon fee title acquisition, public access will be provided for low-intensity, non-facility-related outdoor recreation. As a part of the Wakulla Springs State Park, hunting would not be permitted. Vehicular access by the public will be confined to designated points and routes. Particular emphasis will be given to protection of springs and associated sloughs, sinks and karst windows. Resource management activities in the first year of each fee title acquisition will concentrate on site security (including posting boundaries) and development of a resource inventory in conjunction with the development of a comprehensive management plan.

Long-term management may include a wide range of resource-based recreation and associated facilities. The integration of appropriate public uses will create wildlife and recreational linkages between the State Park and the national forest.

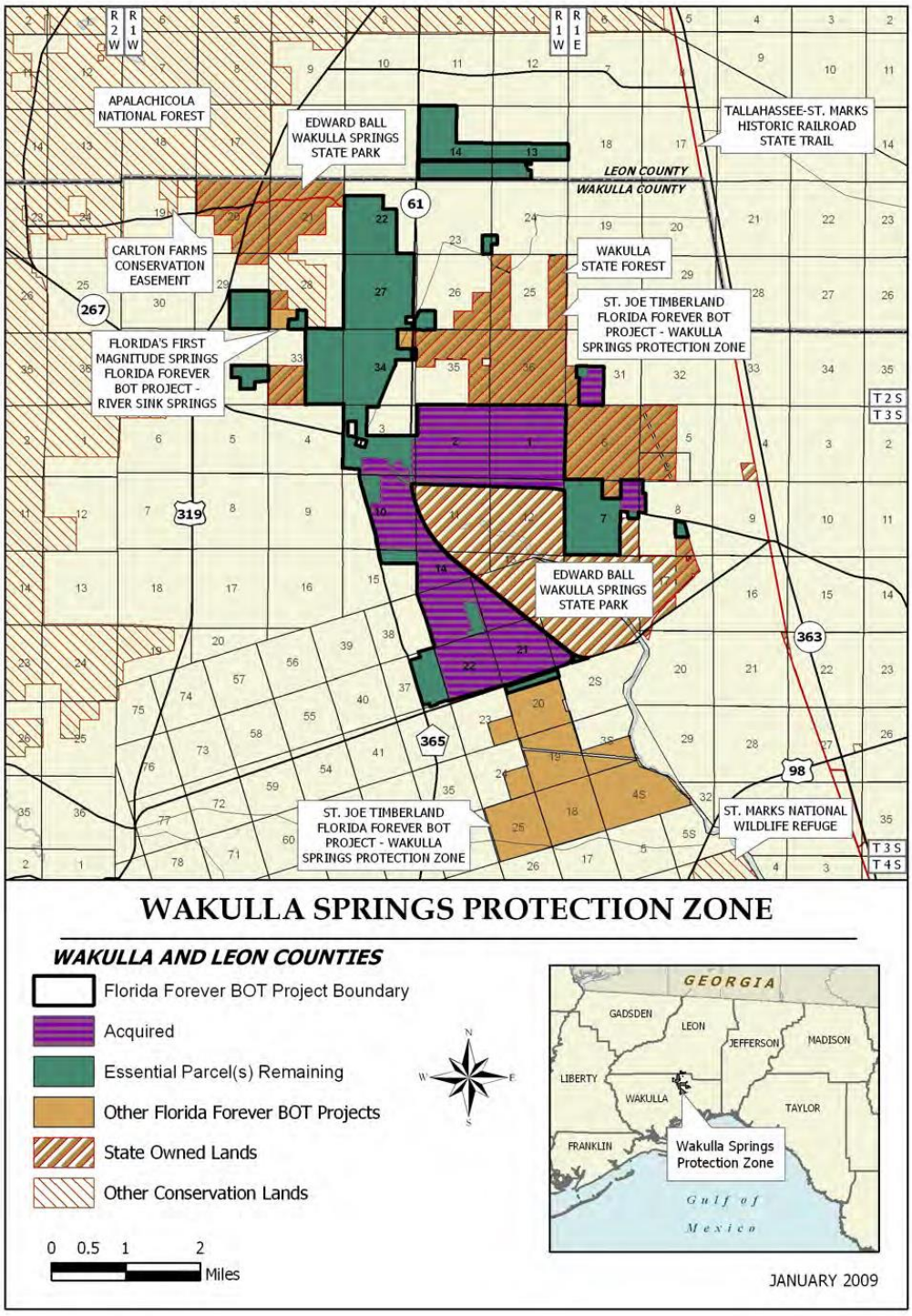
B. Florida Forest Service

Once the core area is acquired and assigned to the FFS, public access will be provided for non-facilities-related, low-intensity outdoor recreation. Until specific positions are provided for the project, public access will be coordinated through the FFS's Tallahassee District Headquarters and management activities will be conducted with district personnel.

Initial or intermediate management efforts will concentrate on site security, public and fire management access, resource inventory, and removal of existing trash. Steps will be taken to insure that the public is provided appropriate access while simultaneously affording protection of sensitive resources. Vehicular use by the public will be confined to designated roads. Any unnecessary access points will be closed. An inventory of the site's natural resources and threatened and endangered flora and fauna will be conducted to provide the basis for formulation of a management plan.

Prior to collection of necessary resource information, management proposals for this project can only be conceptual in nature. Long-range plans for this property will generally be directed toward the restoration of disturbed areas and maintenance of natural communities. Management activities will also stress enhancement of the abundance and spatial distribution of threatened and endangered species. To the greatest extent practical, disturbed sites will be restored to conditions that would be expected to occur in naturally functioning ecosystems. Pine plantations will be thinned to achieve a more natural appearance. Off-site species will eventually be replaced with species that would be expected to occur naturally on the site. An all-season burning program will be established, utilizing practices that incorporate recent research findings.

Wakulla Springs Protection Zone



Whenever possible, existing roads, black lines, foam lines and natural breaks will be utilized to contain and control prescribed and natural fires. Timber management activities will primarily consist of improvement thinnings and regeneration harvests aimed at maintaining and perpetuating forest ecosystems. Stands will not have a targeted rotation age but will be managed to maintain a broad diversity of age classes ranging from young stands to areas with old growth characteristics. This will provide habitat for the full spectrum of species that would be found in the natural environment. The resource inventory will be used to identify sensitive areas that need special attention, protection or management, and to locate areas that are appropriate for any recreational or administrative facilities. Infrastructure development will primarily be located in already disturbed areas and will be the absolute minimum required to allow public access for the uses mentioned above, to provide facilities to accommodate public use, and to administer and manage the property.

The FFS will promote recreation and environmental education in the natural environment. It is not anticipated that recreational facilities will be developed. However, if it is determined that facilities are needed, the use of low impact, rustic facilities will be stressed. High impact, organized recreation areas will be discouraged because of possible adverse effects on the natural environment. Unnecessary roads, firelines and hydrological disturbances will be abandoned and/or restored to the greatest extent practical.

C. Fish and Wildlife Conservation Commission

During the first year after acquisition, emphasis will be placed on site security, posting boundaries, public access, fire management, resource inventory and removal of existing refuse. A conceptual management plan will be developed by the FWCC, describing the goals and objectives of future resource management. Long-range plans will stress ecosystem management, the protection and management of threatened and endangered species and the management of small game hunting opportunities. Essential roads will be stabilized to provide all weather public access and manage operations. Programs providing multiple recreational uses will also be implemented. An all-season prescribed burning management plan will be developed and implemented using conventional and biologically acceptable guidelines. Management activities will strive to manage natural plant communities to benefit native wildlife resources.

Where appropriate and practical, timber resources will be managed using acceptable silvicultural practices as recommended by the FFS. These practices will include reforestation of cleared pinelands and natural regeneration of pine plantations.

Revenue-generating potential The DRP expects no significant revenue from this property immediately after fee title acquisition, and the amount of any future revenue will depend on the nature and extent of public use and facilities developed. The FFS will sell timber as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in upland pine stands and will provide a variable source of revenue, but the revenue-generating potential of this project is expected to be moderate. The FWCC may also sell timber to help offset operational costs. Future revenue from timber resources will depend on successful reforestation and management of cleared pinelands. Additional revenue would be generated from sales of hunting licenses, fishing licenses, wildlife management area stamps and other special hunting stamps or permits.

Cooperators in management activities The DRP will, as appropriate, cooperate with local governments, other state agencies, and the water management district to further resource management, recreational and educational opportunities, and the development of the lands for state park purposes. The FFS and the FWCC will also cooperate with other state and local governmental agencies in managing the area.

Updated 2/29/2012

Management Cost Summaries:

DRP Category Source--Funds	Startup CARL	Recurring CARL	FFS Category Source--Funds	Startup CARL	FWC Category Source--Funds	Startup CARL	Recurring CARL
Salary	$48,840	$48,840	Salary	$65,343	Salary	$37,170	$74,340
OPS	$10,000	$10,000	OPS	$0	OPS	$7,000	$7,000
Expense	$86,342	$6,342	Expense	$90,000	Expense	$45,000	$60,000
OCO	$58,956	$0	OCO	$129,000	OCO	$38,500	$38,500
FCO	$0	$0	FCO	$0	FCO	$75,000	$0
TOTAL	$204,138	$65,142	TOTAL	$284,343	TOTAL	$202,670	$179,840

Exhibit U

Land Management Reviews

Manager's Draft

Land Management Review of
Wakulla State Forest
Lease No. 4287 & 2346
April 25, 2007

Prepared by Division of State Lands Staff

Keith Singleton, Land Acquisition & Management Planner
Lyndi Meeks, Administrative Assistant

For

Wakulla State Forest Review Team

DRAFT

June 18, 2007

Land Manager:	DOF
Area:	4145 acres
County:	Wakulla & Leon
Mgmt. Plan Revised:	10/14/05
Mgmt. Plan Due:	10/14/15

Manager's Draft

Management Review Team Members

Agency Represented	Team member Appointed	Team member In attendance
Private Land Manager	Patrick Minogue	Patrick Minogue
Wakulla County	Bryan Roddenberry	Bryan Roddenberry
DOF	John Barrow	John Barrow
DEP, NW District	Laban C. Lindley	Laban C. Lindley
DRP District	Scott Savery	Scott Savery
FWCC	Adam Warwick	Adam Warwick
Apalachee Audubon	Marvin Collins	Marvin Collins
Observer (DEP/DSL)	Cat Ingram	
Observer (OPPAGA)	Bill Howard	
Observer (OPPAGA)	Claire Mazur	
Observer (OPPAGA)	Susan Munley	
Observer (DOF)	Bryan Johnson	

Process for Implementing Regional Management Review Teams

Legislative Intent and Guidance:

Chapter 259.036, F. S. was enacted in 1997 to determine whether conservation, preservation, and recreation lands owned by the state Board of Trustees of the Internal Improvement Trust Fund (Board) are being managed properly. It directs the Department of Environmental Protection (DEP) to establish land management review teams to evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions, and archaeological features. The teams also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan. If a land management plan has not been adopted, the review shall consider the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices are in compliance with the management policy statement and management prospectus for that property. If the land management review team determines that reviewed lands are not being managed for the purposes for which they were acquired or in compliance with the adopted land management plan, management policy statement, or management prospectus, DEP shall provide the review findings to the Board, and the managing agency must report to the Board its reasons for managing the lands as it has. A report of the review team findings are given to the managing agency under review, the Acquisition and Restoration Council, and the Governor and Cabinet and made available by site on the web at www.dep.state.fl.us/lands/landmgt/maps/default.htm.

Manager's Draft

Review Site

The management review of Wakulla State Forest considered approximately 4,145 acres in Wakulla County that are managed by the Division of Forestry. The team evaluated the extent to which current management actions are sufficient, whether the land is being managed for the purpose for which it was acquired, and whether actual management practices, including public access, are in compliance with the management plan. The management plan update is due on October 14, 2015.

Review Team Determination

Is the land being managed for the purpose for which it was acquired?

After completing the checklist, team members were asked to answer "yes" or "no" to this question. All team members agreed Wakulla State Forest is being managed for the purpose for which it was acquired.

Are actual management practices, including public access, in compliance with the management plan?

After completing the checklist, team members were asked to answer "yes" or "no" to this question. All team members agreed Wakulla State Forest is in compliance with the management plan.

Commendations to the Managing Agency

1. The team commends the DOF for their protection of water quality at this forest (for example, low water crossings, marking trees for buffer strips, in accordance with best management practices). (VOTE 7+, 0-)

2. The team commends the DOF for restoration of natural drainage of McBride Slough. (VOTE: 7+, 0-)

3. The team commends the DOF for the excellent prescribed fire program at this forest. (VOTE 7+, 0-)

4. The team commends the DOF for the wildlife habitat improvements, and creation of diversity for wildlife through their restoration efforts in the area. (VOTE 7+, 0-)

Exceptional Management Actions

The following items received high scores on the review team checklist (see attachments), which indicates that management actions exceeded expectations.

Exceptional management actions:

- Management of the Natural Communities including, the hydric hammock, floodplain swamp, basin swamp, dome swamp, depression marsh and sinkhole.
- Cultural resource survey, protection and preservation.
- Resource management, prescribed fire: area burned, frequency and quality.
- Restoration of upland mixed forest and sand hill.
- Control of invasive animals and plants.
- Management of hydrologic/geologic function including, roads/culverts and water level alteration.
- Resource protection with boundary survey, gates and fencing, signage and law enforcement.
- Public access including roads, parking, recreational opportunities and interpretive signs.
- Adjacent property concerns with expanding development and inholdings/additions.
- Management resources including waste disposal, buildings and equipment.

Recommendations and Checklist Findings

The management plan must include responses to the recommendations and checklist items that are identified below.

Recommendations

The following recommendations resulted from a discussion and vote of review team members.

1. The team recommends that DOF reevaluate the natural community classifications in the management plan update. (VOTE: 7+, 0-)

Manager's Response:

2. The team recommends that DOF develop an interpretive trail at the Woodville tract to improve environmental education and outreach. (VOTE: 7+, 0-)

Manager's Response:

3. The team recognizes the need for an increase in manpower for law enforcement and resource management at this site and recommends an additional full-time employee for the forest. (VOTE: 7+, 0-)

Manager's Response:

Checklist findings

The following items received low scores on the review team checklist (see Attachment 1), which indicates that management actions, in the field, were insufficient (f) or that the issue was not sufficiently addressed in the management plan (p). These items need to be further addressed in the management plan update.

1. **Discussion in the management plan of management issues related to the Sandhill. (f)**

Manager's Response:

2. **Discussion in the management plan of the need for additional funding.(f)**

Manager's Response:

Team Member's Comments

Natural Communities: protection and maintenance: (I.A)

- Upland forest type criteria (soil, etc.) should be better defined.
- This is a new acquisition of land, predominately in planted pine, which is very far from the ultimate goal of historic natural communities. The plan is largely inadequate in addressing specific management practices and timelines to obtain the goal communities.

Listed Species: protection and preservation (I.B1, I.B.2)

- Need plant inventory survey to locate any listed species.
- Site-specific inventory of plants and animals is needed.
- There is a need for an endangered plant inventory and specific management practices to promote and protect endangered species as is consistent with land management objectives.

Cultural Resources: (II.A; II.B)

- There are four archeological sites but other sites are likely present.

Prescribed Fire (Natural Community Maintenance): (III.A)

- Specific burning practices need to be tailored to obtain desired stand species composition.

Wildlife Management: (III.C)

- At least some consideration needs to be given to non-game species management.

Non-native Invasive and Problem Species: (III.D)

- Control measures are being taken to control Japanese climbing fern and mimosa.

Hydrologic/Geologic Function (III.E)

- The goal is to protect water resources on property – need results to determine if this is being done.
- Not required statutorily.
- Culverts were removed as an improvement to surface drainage.
- Management activities consider water quality and this is commendable.

Public Access and Education: (IV.1; IV.2; IV.3; IV.4)

- Need to add some recreational opportunities such as camping when harvesting is complete.
- Because of harvesting, recreational development is being delayed. An interpretive trail should be developed on the Woodville tract.

Review Team Determination

Purpose for Acquisition

- Need to integrate more hiking trails and get primitive camping.
- Burning being done, new plantings, timber harvesting, limiting herbicide and fertilizer use.

Recommendations for Improving Management of this Site:

- Increase staff positions. Further investigate natural community types to confirm if correct.
- Keep some hardwoods. Longleaf pine, wiregrass is good, but does not provide food for species such as bears.
- Need additional staff.

Manager's Draft

PLAN REVIEW		1	2	3	4	5	6	7	AVERAGE
Natural Communities (I.A)									
Upland Mixed Forest	I.A.1	1	1	1	1	1	1	0	0.86
Sandhill	I.A.3	1	1	1	1	1	1	1	1.00
Hydric Hammock	I.A.4	1	1	1	1	1	1	1	1.00
Floodplain Swamp	I.A.5	1	1	1	1	1	1	1	1.00
Basin Swamp	I.A.6	1	1	1	1	1	1	1	1.00
Dome Swamp	I.A.7	1	1	1	1	1	1	1	1.00
Depression Marsh	I.A.8	1	1	1	1	1	1	1	1.00
Sinkhole	I.A.9	1	1	1	1	1	1	0	0.86
Listed species:Protection & Preservation (I.B)									
Animal Inventory	I.B.1	1	1	1	0	1	1	1	0.86
Plant Inventory	I.B.2	1	1	1	0	1	1	0	0.71
Cultural Resources (Archeological & Historic sites) (II.A,II.B)									
Cultural Res. Survey	II.A	1	1	1	1	1	1	1	1.00
Protection and preservation	II.B	1	1	1	1	1	1	1	1.00
Resource Management, Prescribed Fire (III.A)									
Area Being Burned (no. acres)	III.A.1	1	1	1	1	1	1	1	1.00
Frequency	III.A.2	1	1	1	1	1	1	0	0.86
Quality	III.A.3	1	1	1	1	1	1	1	1.00
Restoration of Ruderal Areas (III.B)									
Upland Mixed Forest	III.B.1	1	1	1	1	1	1	1	1.00
Sandhill	III.B.2	1	1	1		1	1	1	1.00
Upland Hardwood Forest	III.B.3	1	1	1		1	1	1	1.00
Wildlife Management (III.C)									
Wildlife Habitat	III.C.1	1	1	1	1	1	1	1	1.00
Hunting/ Fishing Quality	III.C.2		0	1	0	1	1	1	0.67
Non-Native, Invasive & Problem Species (III.D)									
Animals	III.D.1	1	1		1	1	1	1	1.00
Plants	III.D.2	1	1	1	1	1	1	1	1.00
Hydrologic/Geologic function Hydro-Alteration (III.E.1)									
Roads/culverts	III.E.1.a	1	1	1	1	1	1	1	1.00
Water Level Alteration	III.E.1.d	1	1	1	1	1	1	1	1.00
Ground Water Monitoring (III.E.2)									
Ground water quality	III.E.2.a	1	1	1	1	1	1	1	1.00
Ground water quantity	III.E.2.b	1	1	1	1	1		1	1.00
Resource Protection (III.F)									

Boundary survey	III.F.1	1	1	1	1	1	1	1	1.00
Gates & fencing	III.F.2	1	1	1	1	1	1	1	1.00
Signage	III.F.3	1	1	1	1	1		1	1.00
Law enforcement presence	III.F.4	1	1	1	1	1		1	1.00
Adjacent Property Concerns (III.G)									
Land Use									
Expanding development	III.G.1a	1	1	1	1	1	1	1	1.00
Inholdings/additions	III.G.2		1	1	1	1	1	0	0.83
Public Access & Education									
Public Access-Maintenance									
Roads	IV.1a	1	1	1	1	1	1	1	1.00
Parking	IV.1b	1	1	1	0	1	1	1	0.86
Recreational Opportunities	IV.2	1	1	1	1	1	1	1	1.00
Management of Visitor Impacts	IV.3	1	1	1	1	1	1	1	1.00
Interpretive facilities and signs	IV.4	1	1	1	1	1	1	1	1.00
Environmental education/outreach	IV.5	1	1	0	1	1		1	0.83
Managed Area Uses									
Existing Uses									
Hiking Trails	VI.A.1	1	1	1	1	1	1	1	1.00
Hunting	VI.A.2	1	1	1	1	1	1	1	1.00
Environmental Education	VI.A.3	1	1	1	1	1	1	1	1.00
Birdwatching	VI.A.4	1	1	1	1	1	1	1	1.00
Horseback Riding	VI.A.5	1	1	1	1	1		1	1.00
Uses Proposed in Mgmt. Plan									
Primitive Camping	VI.B.1	1	1	1		1	1		1.00

FIELD REVIEW		1	2	3	4	5	6	7	AVERAGE
Natural Communities (I.A)									
Upland Mixed Forest	I.A.1	5	1	4	3	1	4	1	2.71
Sandhill	I.A.3	1	2	2	2	1	2	1	1.57
Hydric Hammock	I.A.4	5	3	4	5	5	5	5	4.57
Floodplain Swamp	I.A.5	5	5	5	5	5	5	5	5.00
Basin Swamp	I.A.6	5	5	5	5	5	5	5	5.00
Dome Swamp	I.A.7	5	5	5	5	5	5	5	5.00
Depression Marsh	I.A.8	5	5	5	5	5	5	5	5.00
Sinkhole	I.A.9	5	5	5	5	5	5	5	5.00
Listed species:Protection & Preservation (I.B)									
Animal Inventory	I.B.1	5	2	3			4	3	3.40
Plant Inventory	I.B.2	4	2	2			3	2	2.60
Cultural Resources (Archeological & Historic sites) (II.A,II.B)									
Cultural Res. Survey	II.A	5	3	3	4		4	4	3.83
Protection and preservation	II.B	5	3	3	4		5	4	4.00

Manager's Draft

Resource Management, Prescribed Fire (III.A)									
Area Being Burned (no. acres)	III.A1	5	5	5	5	5	5	4	4.86
Frequency	III.A.2	5	5	5	4	5	4	2	4.29
Quality	III.A.3	4	5	4	4	4	3	4	4.00
Restoration of Ruderal Areas (III.B)									
Upland Mixed Forest	III.B.1	3	5	4	3	5	3	4	3.86
Sandhill	III.B.2	3	4	4	3	5	3	4	3.71
Upland Hardwood Forest	III.B.3	2	2	3	3	5	2	4	3.00
Wildlife Management (III.C)									
Wildlife Habitat	III.C.1	3	1	3	2	4	3	4	2.86
Hunting/ Fishing Quality	III.C.2	3	1	3	X	4	4	4	3.17
Non-Native, Invasive & Problem Species (III.D)									
Animals	III.D.1	3	4	4	5	5	4	4	4.14
Plants	III.D.2	4	5	4	5	5	4	4	4.43
Hydrologic/Geologic function Hydro-Alteration (III.E.1)									
Roads/culverts	III.E.1.a	4	5	4	5	5	5	4	4.57
Water Level Alteration	III.E.1.d	4	5	4	5	5	5	5	4.71
Ground Water Monitoring (III.E.2)									
Ground water quality	III.E.2.a		4	4	1	1	4	4	3.00
Ground water quantity	III.E.2.b		4	4	1	1		4	2.80
Resource Protection (III.F)									
Boundary survey	III.F.1	5	5	5	5	5	4	5	4.86
Gates & fencing	III.F.2	4	5	5	5	5	3	4	4.43
Signage	III.F.3	5	5	3	5	5	4	4	4.43
Law enforcement presence	III.F.4	4	5	2	4	5	3	4	3.86
Adjacent Property Concerns (III.G)									
Land Use									
Expanding development	III.G.1a	4	5	4	4	5	4	4	4.29
Inholdings/additions	III.G.2	4	5	4	5	5	4	4	4.43
Public Access & Education									
Public Access-Maintenance									
Roads	IV.1a	4	5	4	5	5	4	4	4.43
Parking	IV.1b	3	4	4	5	5	3	4	4.00
Recreational Opportunities	IV.2	3	4	3	4	5	3	4	3.71
Management of Visitor Impacts	IV.3	4	5	3	5	5	3	4	4.14
Interpretive facilities and signs	IV.4	4	5	4	4	5	3	4	4.14
Environmental education/outreach	IV.5	4	4	2	4	5	3	4	3.71
Management Resources									
Maintenance									
Waste disposal	V.1a	5	3	3	5	3	3	4	3.71
Sanitary facilities	V.1b	5	3	1	5	3	3	4	3.43

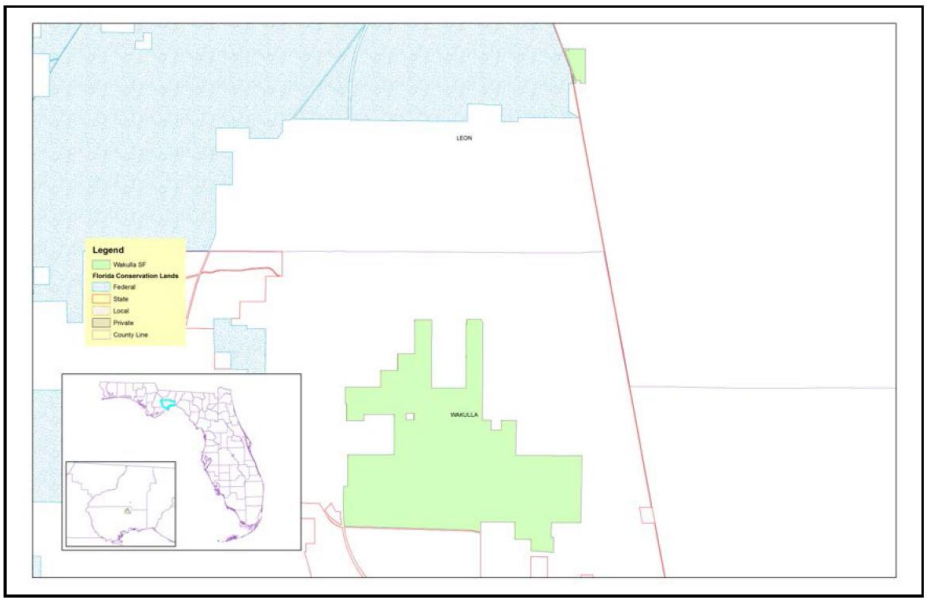
Manager's Draft

Infrastructure									
Buildings	V.2a	4	5	5	5	5	4	5	4.71
Equipment	V.2b	4	5	3	5	5	3	5	4.29
Staff	V.3	2	1	2	4	3	3	4	2.71
Funding	V.4	2	1	2	3	2	2	4	2.29

Name of Site: Wakulla SF **County:** Wakulla

Managed by: Department of Agriculture and Consumer Services **Acres:** 4218.51
Florida Forest Service **Area Reviewed:** Entire tract

Review Date: 06/13/12 **Management Plan Approval Date** 04/13/07



Review Team Determination

Managed in accordance with
Acquisition purpose? Yes =6, No = 0

Management practices, including public access,
in compliance with the management plan? Yes =6, No = 0

Categories	Management Plan Review	Field Review
Natural Communities	1.00	4.21
Listed Species	1.00	3.42
Natural Resource Survey	0.87	3.55
Cultural Resources	1.00	4.25
Prescribed Fire	1.00	4.72
Restoration	1.00	4.43
Exotic Species	0.75	4.19
Hydrology	1.00	4.67
Groundwater Monitoring	0.42	2.58
Surface Water Monitoring	N/A	N/A
Resource Protection	1.00	4.42
Adjacent Property Concerns	0.96	4.20
Public Access & Education	0.93	4.12
Management Resources	N/A	3.83
Managed Area Uses	1.00	N/A
Buildings, Equipment, Staff & Funding	N/A	4.04

Consensus Commendations to the Managing Agency

The following commendations resulted from discussion and vote of the review team members.

1. The team commends the FFS for accomplishing an enormous amount of work with the limited amount of staff and funding, especially high quality roads, water protection, and funding of recreational pursuits. (VOTE: 6+, 0-)

2. The team commends the FFS on an outstanding prescribed burning program on the Wakulla State Forest. (VOTE: 6+, 0-)

3. The team commends the FFS on the outstanding equestrian recreational opportunities on this property. (VOTE: 6+, 0-)

4. The team commends FFS for the care given t the equipment and facilities at this forest. (VOTE: 6+, 0-)

Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The management plan must include responses to the recommendations identified below.

1. The team recommends that efforts should be made to identify and locate listed species. (VOTE: 6+, 0-)

Managing Agency Response:

2. The team recommends that plant and animal species lists be developed and included in the management plan. (VOTE: 6+, 0-)

Managing Agency Response:

3. The team recommends that water quality monitoring of surface and ground water be maintained by the appropriate agencies, and shared with the FFS. (VOTE: 5+, 1-)

Managing Agency Response:

Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

- Natural communities, specifically hydric hammock, floodplain swamp, basin swamp, dome swamp, depression marsh and sinkhole.
- Listed Species, specifically animal inventory.
- Natural Resources Survey/Management Resources, specifically fire effects monitoring, other habitat management effects monitoring and invasive species survey/monitoring.
- Cultural Resources, specifically cultural resource survey and protection and preservation.
- Resource Management, Prescribed Fire, specifically area being burned (no. acres), frequency and quality.
- Restoration of Ruderal Areas, specifically sandhill.

- Forest Management, specifically timber inventory, timber harvesting, reforestation/afforestation and site preparation.
- Non-Native, Invasive & Problem Species, specifically plants and animals prevention and control and prevention of pests/pathogens.
- Hydrologic/Geologic function Hydro-alteration, specifically roads/culverts and water level alteration.
- Resource Protection, specifically boundary survey, gates & fencing, signage and law enforcement presence.
- Adjacent Property Concerns, specifically expanding development and inholdings/additions.
- Public Access & Education, specifically roads and parking.
- Environmental Education & Outreach, specifically wildlife, invasive species, habitat management activities, interpretive facilities and signs, recreational opportunities and management of visitor impacts.
- Management Resource, specifically waste disposal, sanitary facilities, buildings, equipment and staff.

Items Requiring Improvement Actions in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than .5 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

1. The need for ground water monitoring, specifically quality and quantity of water, with documentation in the management plan.
Managing Agency Response:

2. Proposed uses, specifically primitive camping, with documentation in the management plan.
Managing Agency Response:

PLAN REVIEW		1	2	3	4	5	6	AVERAGE
Natural Communities (I.A)								
Upland Mixed Forest	I.A.1	1	1	1	1	1	1	1.00
Sandhill	I.A.2	1	1	1	1	1	1	1.00
Hydric Hammock	I.A.3	1	1	1	1	1	1	1.00
Floodplain Swamp	I.A.4	1	1	1	1	1	1	1.00
Basin Swamp	I.A.5	1	1	1	1	1	1	1.00
Dome Swamp	I.A.6	1	1	1	1	1	1	1.00
Depression Marsh	I.A.7	1	1	1	1	1	1	1.00
Sinkhole	I.A.8	1	1	1	1	1	1	1.00
Upland Hardwood Forest	I.A.9	1	1	1	1	1	1	1.00
Listed species:Protection & Preservation (I.B)								
Animal Inventory	I.B.1	1	1	1	1	1	1	1.00
Plant Inventory	I.B.2	1	1	1	1	1	1	1.00
Natural Resources Survey/Management Resources (I.C)								

Listed species or habitat monitoring	I.C.2	1	0	0	1	1	1	0.67
Other non-game species or habitat monitoring	I.C.3	1	0	0	1	1	1	0.67
Fire effects monitoring	I.C.4	1	1	1	1	1	1	1.00
Other habitat management effects monitoring	I.C.5	1	1	1	1		1	1.00
Invasive species survey / monitoring	I.C.6	1	1	1	1		1	1.00
Cultural Resources (Archeological & Historic sites) (II.A,II.B)								
Cultural Res. Survey	II.A	1	1	1	1		1	1.00
Protection and preservation	II.B	1	1	1	1		1	1.00
Resource Management, Prescribed Fire (III.A)								
Area Being Burned (no. acres)	III.A.1	1	1	1	1		1	1.00
Frequency	III.A.2	1	1	1	1		1	1.00
Quality	III.A.3	1	1	1	1		1	1.00
Restoration of Ruderal Areas (III.B)								
Sandhill	III.B.2	1	1	1	1	1	1	1.00
Forest Management (III.C)								
Timber Inventory	III.C.1	1	1	1	1	1	1	1.00
Timber Harvesting	III.C.2	1	1	1	1	1	1	1.00
Reforestation/Afforestation	III.C.3		1	1	1	1	1	1.00
Site Preparation	III.C.4		1	1	1	1	1	1.00
Non-Native, Invasive & Problem Species (III.E)								
Prevention								
prevention - plants	III.E.1.a	1	0	1	1	1	0	0.67
prevention - animals	III.E.1.b	1	0	1	1	1	0	0.67
prevention - pests/pathogens	III.E.1.c	1	0	1	1	1	0	0.67
Control								
control - plants	III.E.2.a	1	0	1	1	1	1	0.83
control - animals	III.E.2.b	1	0	1	1	1	1	0.83
control - pest/pathogens	III.E.2.c	1	0	1	1	1	1	0.83
Hydrologic/Geologic function Hydro-Alteration (III.F.1)								
Roads/culverts	III.F.1.a	1	1	1	1	1	1	1.00
Water Level Alteration	III.F.1.d	1	1	1	1	1	1	1.00
Ground Water Monitoring (III.F.2)								
Ground water quality	III.F.2.a	0	1	0	1	0	0	0.33
Ground water quantity	III.F.2.b	0	1	1	1	0	0	0.50
Surface Water Monitoring (III.F.3)								
Resource Protection (III.G)								
Boundary survey	III.G.1	1	1	1	1	1	1	1.00
Gates & fencing	III.G.2	1	1	1	1	1	1	1.00
Signage	III.G.3	1	1	1	1	1	1	1.00

Law enforcement presence	III.G.4	1	1	1	1	1	1	1.00
Adjacent Property Concerns (III.H)								
Land Use								
Expanding development	III.H.1.a	1	1	1	1	1	1	1.00
Inholdings/additions	III.H.2	1	1	1	1	1	1	1.00
Discussion of Potential Surplus Land Determination	III.H.3	1	1	1	1	1	1	1.00
Surplus Lands Identified?	III.H.4	1	0	1	1	1	1	0.83
Public Access & Education								
Public Access								
Roads	IV.1.a	1	1	1	1	1	1	1.00
Parking	IV.1.b	1	1	1	1	1	1	1.00
Environmental Education & Outreach								
Wildlife	IV.2.a	1	1	1	1	1	0	0.83
Invasive Species	IV.2.b		1	1	1	1	0	0.80
Habitat Management Activities	IV.2.c	1	1	1	1	1	0	0.83
Interpretive facilities and signs	IV.3	1	1	1	1	1	1	1.00
Recreational Opportunities	IV.4	1	1	1	1	1	1	1.00
Management of Visitor Impacts	IV.5	1	1	1	1	1	1	1.00
Managed Area Uses								
Existing Uses								
Hiking Trails	VI.A.1	1	1	1	1	1	1	1.00
Hunting	VI.A.2	1	1	1	1	1	1	1.00
Environmental Education	VI.A.3	1	1	1	1	1	1	1.00
Bird Watching	VI.A.4	1	1	1	1	1	1	1.00
Horseback Riding	VI.A.5	1	1	1	1	1	1	1.00
Proposed Uses								
Primitive Camping	VI.B.1	0	1	0	1	0	1	0.50

Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 2.5 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

1. The need for ground water monitoring, specifically water quantity, with documentation in the management plan.
Managing Agency Response:

FIELD REVIEW		1	2	3	4	5	6	AVERAGE

Natural Communities (I.A)								
Upland Mixed Forest	I.A.1	3	3	3	4	3	2	3.00
Sandhill	I.A.2	3	4	3		2	2	2.80
Hydric Hammock	I.A.3	5	4	5	5	5	5	4.83
Floodplain Swamp	I.A.4	5	4	5	5	5	5	4.83
Basin Swamp	I.A.5	5	4	5	5	5	5	4.83
Dome Swamp	I.A.6	5	4	5	5	5	5	4.83
Depression Marsh	I.A.7	5	4	5	5	5	4	4.67
Sinkhole	I.A.8	4	4	5	5	5	5	4.67
Upland Hardwood Forest	I.A.9	3	3	3	4	4		3.40
Listed species:Protection & Preservation (I.B)								
Animal Inventory	I.B.1	4	2	2	5	4	4	3.50
Plant Inventory	I.B.2	4	2	3	5	2	4	3.33
Natural Resources Survey/Management Resources (I.C)								
Listed species or habitat monitoring	I.C.2	3	3	2	4	2	4	3.00
Other non-game species or habitat monitoring	I.C.3	2	3	2	3	3		2.60
Fire effects monitoring	I.C.4	4	4	5	5	4	5	4.50
Other habitat management effects monitoring	I.C.5	3	3	4	4	3	5	3.67
Invasive species survey / monitoring	I.C.6	4	4	3	4	4	5	4.00
Cultural Resources (Archeological & Historic sites) (II.A,II.B)								
Cultural Res. Survey	II.A	4	5	4	4	5	5	4.50
Protection and preservation	II.B	4	5	2	4	4	5	4.00
Resource Management, Prescribed Fire (III.A)								
Area Being Burned (no. acres)	III.A1	5	5	5	5	5	5	5.00
Frequency	III.A.2	5	5	5	5	5	4	4.83
Quality	III.A.3	4	5	5	4	4	4	4.33
Restoration of Ruderal Areas (III.B)								
Sandhill	III.B.2	4	4	4	4	4	4	4.00
Forest Management (III.C)								
Timber Inventory	III.C.1	5	5	5	4	5	5	4.83
Timber Harvesting	III.C.2	4	5	5	4	5	4	4.50
Reforestation/Afforestation	III.C.3		5	5	4	4	4	4.40
Site Preparation	III.C.4		5	5	4	4	4	4.40
Non-Native, Invasive & Problem Species (III.E)								
Prevention								
prevention - plants	III.E.1.a	5	4	3	5	4	5	4.33
prevention - animals	III.E.1.b	5	4	3	5	4	5	4.33
prevention - pests/pathogens	III.E.1.c	5	4	3	5	4	5	4.33

Control								
control - plants	III.E.2.a	4	4	3	5	4	5	4.17
control - animals	III.E.2.b	4	4	3	5	3	5	4.00
control - pest/pathogens	III.E.2.c	4	4	3	5	3	5	4.00
Hydrologic/Geologic function Hydro-Alteration (III.E.1)								
Roads/culverts	III.F.1.a	5	5	5	5	5	5	5.00
Water Level Alteration	III.F.1.d	4	5	3	5	4	5	4.33
Ground Water Monitoring (III.F.2)								
Ground water quality	III.F.2.a		3	3	X	X	2	2.67
Ground water quantity	III.F.2.b		3		X	X	2	2.50
Surface Water Monitoring (III.E.3)								
Resource Protection (III.F)								
Boundary survey	III.G.1	5	5	4	4	5	5	4.67
Gates & fencing	III.G.2	5	5	4	5	4	5	4.67
Signage	III.G.3	4	5	4	5	4	5	4.50
Law enforcement presence	III.G.4	4	5	3	3	3	5	3.83
Adjacent Property Concerns (III.G)								
Land Use								
Expanding development	III.H.1.a	5		3	4	4	5	4.20
Inholdings/additions	III.H.2	4		3	5	4	5	4.20
Public Access & Education								
Public Access								
Roads	IV.1.a	5	5	4	5	5	5	4.83
Parking	IV.1.b	5	5	4	5	5	5	4.83
Environmental Education & Outreach								
Wildlife	IV.2.a	4	3	3	4	4	5	3.83
Invasive Species	IV.2.b		3	3	4	3	5	3.60
Habitat Management Activities	IV.2.c	4	3	3	4	4	5	3.83
Interpretive facilities and signs	IV.3	4	3	4	4	3	5	3.83
Recreational Opportunities	IV.4	5	3	4	4	4	5	4.17
Management of Visitor Impacts	IV.5	5	3	3	4	4	5	4.00
Management Resources								
Maintenance								
Waste disposal	V.1.a	4	3	3	4	4	4	3.67
Sanitary facilities	V.1.b	4	3	3	4	5	5	4.00
Infrastructure								
Buildings	V.2.a	5	5	5	4	5	5	4.83
Equipment	V.2.b	5	5	5	4	5	5	4.83
Staff	V.3	3	3	4	3	3	5	3.50
Funding	V.4	3	3	4	3	2	3	3.00

Florida Forest Service Manager and Key Staff Present:

- Daniel Stevens, Manager
- Ken Weber

- Dennis Hardin
- John Browne

APPENDIX:

The following comments represent individual comments, and may not represent the consensus of the land management review team.

I.A. Natural Communities

- Continue protection efforts for springs/sinks & slough; good job on pine restoration efforts.

I.B. Listed Species

- Suggest use of volunteer to do inventory both
- Pursue inventory funding or get volunteer inventory work.
- FFS should do some inventory surveys on wildlife in managed (actively) natural communities.

I.C. Natural Resource Survey/Monitoring Resources

- Develop some plan objectives for inventory & management of listed & non-game species.
- 2+3: scored as a 2 only because photo monitoring.
- Effort should be made to collect geographic coordinates (GPS) and natural history observations for listed species. Bird and plant species listed should be solicited from individual (e.g., birders) or organization (e.g., Native Plant Society).

II.A.B. Cultural Resources

- Update plan w/DHR master site file.
- No monitoring currently ongoing at unknown archaeological sites.

III.A. Resource Management

- Excellent burn program.

III.E. Non-native, Invasive & Problem Species

- Need to add procedure to plan that is in contracts.
- Add procedures to plan.
- Add procedures for prevention to plan.

III.F. Hydrologic/Geologic Function

- Recommend to have water monitored.
- NWFWMD is tracking (?) @ Double Springs. DEP & NWFWMD should help w/this.
- Not statutorily required.
- Ground water quality is the principal reason for acquisition of this forest. Monitoring of water quality by another state agency should be sought. This needs to be addressed in the management plan.

III.G. Resource Protection

- Add signage @ N. (Cooperwood) entrance.

III.H. Adjacent Property Concerns

- Pursue life estate for inholder (Chattan).

IV. Public Access and Education

- Continue to monitor equestrian impacts, especially around spring/sinks & along slough; good job on signage, etc.
- Education & outreach need to be addressed in mgmt. plan.

V. Infrastructure/ Management Resources

- Funding needs are not sufficient. Need clerical help.
- Staffing level seems very low for the job requirements.
- Need funding for animal species inventory.
- Additional funds would be useful to conduct nat. res. inventories and water quality monitoring.

Exhibit V

Compliance with Local Comprehensive Plan(s)

(Will be inserted once received)

Exhibit V

Exhibit W

State Forest Management Plan
Advisory Group Summary

Management Plan Advisory Group Organizational Meeting
Wakulla State Forest
May 23, 2016
10:30 a.m.

Meeting Minutes

MPAG Members Present:

- Chris Colburn — Center Manager, Florida Forest Service (FFS)
- Diane Alix — Florida Fish and Wildlife Conservation Commission (FWC)
- John Crowe — Northwest Florida Water Management District (NWFWMD) (representing Jon Costello)
- Pete Scalco — Division of Recreation and Parks, Department of Environmental Protection (DRP/DEP)
- Cal Jamison — Local Soil and Water Conservation District Representative
- Brian Pelc — The Nature Conservancy
- Joe Walker — Local Private Property Owner
- Sharon Gray — Leon County Representative (representing Jane Sauls)
- George Weaver — User Group Representative (hikers)
- Pam Freeman — User Group Representative (equestrians)
- Larry Perrin — User Group Representative (hunters)

MPAG Members Not Present:

- Jon Costello — NWFWMD
- William Mathers — Local Private Property Owner
- Ralph Thomas — Wakulla County Representative
- Jane Sauls — Leon County Representative

Staff:

- Randy Gregory, FFS
- Jeff Johnson, FFS
- Ryan Slyter, FFS
- Brad Ellis, FFS
- John Browne, FFS
- Todd Knapp, FFS
- Bill Korn, FFS
- Cat Ingram, FFS
- Marti Miller, FFS
- Patty Wilbur, DRP/DEP

Guests:

- John Glum, landowner
- Alan Reese
- Joe Walker, resident
- Chuck Hess, SWCB
- Ayanna Jossie, The Florida Channel

Meeting Start Time: 1O:30 a.m.

- Mr. Korn opened the meeting and thanked Mr. Scalco and the Wakulla Springs State Park for the hospitality and usage of the facilities for the public meetings.
- Mr. Korn continued by explaining the purpose, statutory requirements and management plan development process within which the MPAG members are called upon to provide input into the draft land management plan. Mr. Korn reviewed which entities the management plan advisory group members represent.
- Mr. Korn also explained the Sunshine Law's role in the MPAG public hearings and MPAG member appointment timeframe.
- FFS staff listed how the meetings were appropriately advertised to the public.
- Mr. Korn provided a rundown of the various approvals the draft land management plan must go through both before and after the MPAG public hearings have occurred.
- Next, everyone in the room introduced themselves and explained what entity or organization they are with, and/or why they have interest in the meeting.
- Mr. Korn explained the notion of consensus and how it relates to the group's determinations. Also explained was the fact that the FFS Director is the ultimate decider on any changes made to the draft plan.
- Mr. Korn explained that following a PowerPoint presentation at the public hearing, there would be a question/answer session and they were all welcome to ask questions too. At the public hearing/public testimony part of the meeting, Mr. Korn encouraged them to listen for the public's ideas/concerns. He advised that at the MPAG Workshop meeting to follow would be an opportunity to share their thoughts on what they'd heard from the public and their ideas on the draft management plan.
- The advisory group decided to elect Mr. Colburn as MPAG Chair. The motion was seconded by Mr. Scalco.
- No opposition; the motion was approved.
- It was determined that no written comments had been received by FFS regarding the draft plan.
- Two advisory group members were noted as not present and not having representation at the meeting(s).
- The logistics of the facilities, bathrooms, etc. were laid out for the meeting attendees benefit.

Meeting End Time: 10:48 a.m.

Public Hearing
Wakulla State Forest
May 23, 2016
11:00 a.m.

Meeting Minutes

MPAG Members Present:

- Chris Colburn — Center Manager, Florida Forest Service (FFS)
- Diane Alix — Florida Fish and Wildlife Conservation Commission (FWC)
- John Crowe — Northwest Florida Water Management District (NWFWMD) (representing Jon Costello)
- Pete Scalco — Division of Recreation and Parks, Department of Environmental Protection (DRP/DEP)
- Cal Jamison — Local Soil and Water Conservation District Representative
- Brian Pelc — The Nature Conservancy
- Joe Walker — Local Private Property Owner
- Sharon Gray — Leon County Representative (representing Jane Sauls)
- George Weaver — User Group Representative (hikers)
- Pam Freeman — User Group Representative (equestrians)
- Larry Perrin — User Group Representative (hunters)

MPAG Members Not Present:

- Jon Costello — NWFWMD
- William Mathers — Local Private Property Owner
- Ralph Thomas — Wakulla County Representative
- Jane Sauls — Leon County Representative

Staff:

- Randy Gregory, FFS
- Jeff Johnson, FFS
- Ryan Slyter, FFS
- Brad Ellis, FFS
- John Browne, FFS
- Todd Knapp, FFS
- Bill Korn, FFS
- Cat Ingram, FFS
- Marti Miller, FFS
- Patty Wilbur, DRP/DEP

Guests:

- John Glum, landowner
- Alan Reese
- Joe Walker, resident
- Chuck Hess, SWCB
- Ayanna Jossie, The Florida Channel

Meeting Start Time: 11:00 a.m.

- Mr. Colburn, the MPAG Chairperson welcomed everyone to the public hearing on behalf of all the MPAG members.
- Mr. Korn continued the meeting and gave a general overview of the purpose of the public hearing.
- Mr. Slyter gave a PowerPoint presentation on the draft plan, including informative points on acquisition, funding, location, tracts and the goals and objectives to be accomplished on the forest during the next ten-year period.
- Mr. Perrin inquired about the acreage on the forest. Mr. Johnson and Mr. Colburn answered and elaborated on specific tract acreages.
- Mr. Korn stated that two speaker forms had been filled out and submitted to FFS staff.
- Mr. Glunn asked about the land on the west side of Crawfordville Highway. Mr. Colburn stated that FFS does not manage that area. Mr. Scalco elaborated, as the question related to Wakulla Springs State Park (WSSP) land. Mr. Glen asked when the usage of those lands were/will be vetted and Mr. Scalco stated that public vetting of WSSP lands will occur in 2017.
- Speakers:
- 1) Mr. Reese stated that the state of Alaska currently has a policy that prohibits controlled burns. He asked if the FFS would consider re-addressing the issue in Florida, as the burning eliminates hardwoods which provide food, etc., for wildlife. He stated that he would also like to see no burning in the national forest system. He brought up the subject of Harper's beauty, a plant which is only found in the local vicinity in the United States. He declared that the plant is extremely rare and can be found on Department of Transportation (DOT) land in the medians. He stated that where there are controlled burns, the plant is not found. However, the plant is found in the DOT medians, where no controlled burning is performed.
- Mr. Reese inquired about the listed species on the forest and questioned their population's effects from fire. He stated he is aware that the notion is "radical." He stated that, from an outsider, it looks like FFS is a timber management company. Some discussion ensued on the topic amongst the group.
- 2) Mr. Hess discussed fire habitat and fire frequency and needed return intervals. He stated that a 3 year return interval is needed, as less than that would create the natural grasslands, and more than that would create overgrowth. Mr. Hess declared that of the burnable acreage on WaSF, FFS is not burning enough. High frequency, low intensity burns are needed. He said that the loblolly trees need to be worked out of the system.
- Mr. Reese and Mr. Hess were permitted to briefly discuss their opposing views on prescribed fire versus natural burns.
- With no other speakers, Mr. Korn adjourned the public hearing.

Meeting End Time: 11:21 p.m.

Management Plan Advisory Group Meeting
Wakulla State Forest
May 23, 2016
1:00p.m.

Meeting Minutes

MPAG Members Present:

- Chris Colburn — Center Manager, Florida Forest Service (FFS)
- Diane Alix — Florida Fish and Wildlife Conservation Commission (FWC)
- John Crowe — Northwest Florida Water Management District (NWFWMD) (representing Jon Costello)
- Pete Scalco — Division of Recreation and Parks, Department of Environmental Protection (DRP/DEP)
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- George Weaver — User Group Representative (hikers)
- Pam Freeman — User Group Representative (equestrians)
- Larry Perrin — User Group Representative (hunters)

MPAG Members Not Present:

- Jon Costello — NWFWMD
- William Mathers — Local Private Property Owner
- Ralph Thomas — Wakulla County Representative
- Jane Sauls — Leon County Representative

Staff:

- Randy Gregory, FFS
- Jeff Johnson, FFS
- Ryan Slyter, FFS
- John Browne, FFS
- Bill Korn, FFS
- Cat Ingram, FFS
- Marti Miller, FFS
- Patty Wilbur, DRP/DEP

Guests:

- John Glum, landowner
- Alan Reese
- Joe Walker, resident
- Chuck Hess, SWCB
- Ayanna Jossie, The Florida Channel

Meeting Start Time: 1:00p.m.
Note: In between the public hearing and the commencement of this meeting, Mr. Weaver handed Ms. Ingram written comments to be inserted into the draft plan.
Also during this time, Ms. Gray handed Mr. Korn a note regarding a mistake in the title of one of the exhibits.

- Mr. Korn started the meeting by going over the meeting structure that would take place and specifics regarding staff and member responsibilities regarding the meeting minutes in the coming days/weeks.
- Mr. Korn declared a "page-by-page" process would be the way the group would be reviewing and commenting on the draft plan today. The notion of "consensus" was also once again discussed.
- Mr. Korn asked if any advisory group members had comments regarding statements made by the public during the previous public hearing.
- Mr. Perrin stated that Mr. Reese had a point, in that much of the public is probably not aware of why prescribed burning is important. He wondered if stating the importance of running fire in fire adapted communities should be added more specifically to the introduction of the draft plan. The group discussed that prescribed burning is a big component of the draft land management plan, as over 4,000 acres of the state forest are fire dependent.
- Mr. Perrin inquired about the short list of management needs on the executive summary page. He asked if the intent is to paint a picture of what we want the forest to look like with what is listed. He wondered if the six operational plans mentioned in the plan include the right amount of information, or if this draft management plan should contain more detail.
- Mr. Korn noted the perceptive idea and question, and stated that this was a conceptual plan and the operational plans are more "beefed up." Mr. Colburn stated that this draft plan does contain specific fire return interval numbers in the goals and objectives portion of the plan.
- Mr. Perrin questioned if the way FFS has been doing the ten-year management plans was the way the group wants this plan to be as well.
- Mr. Korn asked that the group focus on the text/language at hand contained within this draft plan.
- Ms. Freeman stated that the draft plan is driven by the annual budget. The draft plan is general because FFS does not yet know what the budget over the next ten years will be.
- Mr. Weaver stated that the list of management needs on the executive summary page is fine, and that there is a place in the plan that lists out the specific goals and objectives pertinent to WaSF management needs.
- Ms. Alix pointed out a grammatical error.
- Mr. Jamison pointed out that the short list of management needs on the executive summary page does not address cultural needs.
- Mr. Pelc asked if the historical natural community table on the executive summary lists newly acquired data or older data. Mr. Korn and Mr. Colburn responded with an explanation of the past process working with FNAI to capture both historical natural community types and current natural community types. Traditionally, FFS has only listed the "historic" acres in the Executive Summary section.
- Mr. Perrin submitted to Ms. Ingram some language to be added to page 1, paragraph 3. The group concurred that they were fine with the additional language.

- Mr. Pelc asked if the liaison group mentioned on page 5 of the draft plan is a separate group from the advisory group. FFS staff answered the two groups are different.
- Mr. Pelc inquired about the "alternative methods" regarding restoring native groundcover mentioned in goal 3. Mr. Korn stated that there is more information and details regarding that subject later in the plan in the NATURAL Community management sections.
- Mr. Pelc stated that there is not much emphasis on prescribed fire seasonality for goal 4. Mr. Colburn discussed the subject further. Performance measures will capture burning accomplishments by time of year.
- Mr. Pelc inquired about the type of information coming out of prescribed burns and if instead of expressing it in acreage, if FFS could take photo points for more objective measures. Mr. Colburn stated that this is a good idea and that FFS does have photo points and have been collecting them for ten years.
- Mr. Korn offered the idea of adding language regarding the continuation of photo point monitoring under the appropriate goal on page 5. Everyone agreed.
- Ms. Alix asked if the Wildlife Management Strategy mentioned in Goal 5 (Listed and Rare Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration) is a separate plan. The group advised her that it is, and FWC has to create it. Mr. Korn stated that FWC asked FFS to put this verbiage in FFS management plans. He further commented that Wildlife Conservation Prioritization and Recovery Program reports (WCPRs) with specific wildlife strategies and monitoring protocaols which are prepared by FWC conservation biologists - are done now only on FWC lead-managed areas. FFS leans on FWC for wildlife monitoring, etc., and FFS and FWC must work to coordinate their efforts.
- Mr. Scalco stated the FFS-managed area is clearly understaffed. Mr. Korn advised that that type of issue must be pursued and addressed at a higher level within the state agencies.
- Mr. Pelc spoke about goal 5 and stated that there is not much mentioned for habitat improvement for listed species. He questioned if there would actually be enhancement on the ground. Mr. Korn stated that FFS leans on FWC for those types of issues. If there is a need for specific species monitoring, then FFS looks to FWC for guidance regarding the needs of wildlife. FFS tends to manage for habitat, not individual specific species. The language contained within the draft plan is how FFS would like the situation to be handled, and FWC reliance is a big part of that process.
- Mr. Pelc expressed he thinks there is disconnect among goal 5 and the three listed objectives. Mr. Korn explained the linkage among a strategy, monitoring and implementation of what is stated in the three objectives.
- Mr. Weaver stated that goal 5 cannot be accomplished without FWC, and questioned whether FWC cooperation should be mentioned in the goal. Mr. Korn elaborated on FFS management of habitat, and how other goals contained within the draft plan (fire management) also speak to that end. Mr. Colburn elaborated on goal 5 and the pertinent objectives.
- Mr. Pelc asked if a fourth objective could be added to goal 5 that states that if FFS has enough knowledge of an area, prior to gathering more monitoring info, then FFS may implement a strategy. Mr. Colburn stated that not having an objective at this spot in the plan would not preclude FFS from implementing that work.
- Mr. Pelc spoke about goal 6 (Non-Native Invasive Species Maintenance and Control) and stated that perhaps it needed to be more sophisticated. He asked what info is already out there. Mr. Korn stated that that was addressed in more detail in the text of the plan and also RESTORE money would help fund the issue.

- Ms. Alix asked what other historical sites, other than the cemetery, were out on WaSF. Mr. Colburn answered that the other sites were not much to see.
- Mr. Walker asked about burial mounds. Mr. Korn stated there were no burial mounds that FFS or DHR is aware of on the forest. Mr. Jamison stated that historic canals lie within the southeast portion of the forest. Mr. Colburn asked Mr. Jamison if he thought FFS was missing some historical or archaeological sites. Mr. Jamison stated that he thought so, especially areas around sinkholes and perhaps sites that are related to historical logging practices.
- Ms. Alix stated that a numbering error was present within goal 9.
- Mr. Pelc asked if Flint Rock WMA could be added to the chart on page 9. FFS staff agreed to add it.
- Mr. Colburn told the group about the Exhibit E title mix-up Ms. Gray found during the break.
- Ms. Alix asked if one of the exhibits showed gopher tortoise locations on the forest. The FNAI element occurrence site map was reviewed. FFS staff discussed.
- Mr. Perrin asked if the forest has had a natural community/plant and animal species survey performed. Mr. Korn answered that a natural community map was developed by FNAI while they were on the ground in the forest. Mr. Colburn stated that Table 5 used to show rare animals/plants that may occur in the WaSF habitats, but FFS has transitioned away from that format and to capture only those rare species that are documented andknown to occur on the forest.
- Mr. Perrin stated that red-cockaded woodpeckers are not listed on table 5. Mr. Korn stated that FFS would go over the continuity of the table and maps with the State Forest Ecologist.
- Mr. Pelc stated that the first sentence on page 24 under #5 referred to what he was talking about earlier in the meeting and that he is satisfied with the way this subject is worded in the draft plan.
- Ms. Alix asked why the black bear is listed on page 24, as it is not on the actual listed species list put forth through FWC. The advisory group advised her that what is mentioned in this section of the plan is not necessarily naming it as a "listed" species.
- Mr. Pelc stated that FWC has a very progressive and well-funded invasive species treatment section. FFS can submit appropriate state forest-related information to the FWC for priority ranking and potentially funded treatments. Mr. Colburn and Mr. Korn discussed the possible use of this resource on the state forest. Mr. Pelc further discussed the topic and talked about FWC's practice of breaking up properties into zones or units, much like FFS does for prescribed fire, for the purpose of getting those sections into a treatment regime. Mr. Korn questioned whether or not that would be needed at WaSF. Mr. Colburn opined that FWC's help would not be necessary on this state forest. Mr. Korn and Mr. Colburn discussed funding related to the issue.
- Mr. Pelc asked what the word "compatible" refers to at the top of page 27, and if the liaison group will have input on what constitutes as "compatible." Mr. Korn explained that the liaison group is utilized simply as communication among the public and manager as general guidance to the direction of how the forest is used. It has been especially helpful to resolving equestrian issues on the forests. Mr. Pelc stated that he has heard some goofy ideas for usage of state-owned conservation lands lately, but what FFS has planned for recreation on WaSF seems good to him.
- Mr. Perrin asked if FFS would be putting in a water facility to prevent the horses from messing up the water source area, in reference to #7 on page 28. Mr. Gregory stated that buckets are available for equestrians to get water for their horses from the water source. Ms. Gray added that the majority of equestrians tote their own water for their horses. Mr. Colburn stated that

there is not a need to install water facilities for horses due to the size of WaSF and the length of the trail.

- Mr. Walker stated that the hunter gates on the forest are not being controlled enough, as hunters are continually disobeying the FFS gates and controls on entry into the forest. Mr. Gregory stated that the issue has been addressed and FWC has strengthened their presence in the area. If there are specific areas that hunters are illegally accessing, then individuals need to let FFS know and it will be handled. Mr. Colburn further discussed the issue and talked about designated entrances for hunters and the lack of check-in stations.
- Mr. Walker wondered if the illegal access issue would be less pervasive if FFS allowed hunters to drive their vehicles further into the forest. Mr. Johnson declared that due to environmentally sensitive springs and other areas on the forest, the roads cannot be opened up any further. Mr. Gregory and Mr. Walker further discussed the hunting/access issue. Mr. Perrin also discussed the issue and stated that this was a topic of controversy among hunters, since a lack of roads actually helps keep hunters dispersed throughout the forest. He stated that he thinks hunter access should be left the way it is.
- Ms. Alix asked if folks apply for handicap permits. Mr. Gregory stated that they do, and further discussed the topic.
- Mr. Walker talked about how there were some differences in opinion regarding the management practice of prescribed burning expressed earlier in the meeting. He stated that he likes the practice.
- Mr. Pelc, Mr. Korn and Mr. Gregory discussed the option of adding wildfire mitigation into the introductory paragraph.
- Mr. Pelc asked what the difference between contain and control is. FFS staff responded and the group discussed. Mr. Pelc asked what the difference between a barrier and a fireline is. Mr. Colburn answered in detail with additional information added by Mr. Korn.
- Ms. Alix asked if WaSF is part of Sustainable Forestry Initiative program. Mr. Colburn answered that it is not.
- Mr. Perrin stated that table #7 is a good table. He inquired whether or not FFS's plan of natural community management is to move toward historical natural communities. Mr. Korn answered his question in detail regarding efforts, restoration, working forests versus forests being restored. The idea behind this format was to provide a snapshot in time, a benchmark, of current status. Generally yes, that was the goal to restore to the historic community, however, on this forest there were substantial acres historically of upland hardwood forest that had been converted to planted pine and that FFS had no other plans over this ten-year planning period anyway to attempt to convert these lands back to upland hardwood forest.
- Mr. Perrin stated that he thought that somewhere in this section of the draft plan, FFS should state that table 7 should be accompanied by an explanation of what each column refers to and that the table paints a picture of what it is we are working towards.
- Mr. Pelc stated that he would like to see the return interval for upland pine to be "2-3" instead of "3-4" in table #9. Mr. Colburn agreed with Mr. Pelc's desire for such a return interval. Mr. Colburn stated that FFS didn't want to paint themselves into a corner by putting that in the table, and in actuality, the return interval is "2-3."
- Mr. Korn stated that this is the first time such a chart has been placed in a FFS land management plan. In future plans, the format will be mimicked as it is here, and it will go through all applicable natural communities and define their status breakdown using this type of table.
- Mr. Jamison pointed out a grammatical error within the sinkhole section of the draft plan. He stated that when he performed the original karst survey in the area, he made note of all

sinkholes, whether they were wet or not. He declared that the sinkhole acreage listed within the draft plan should probably be higher. Mr. Colburn stated that FNAI can't do polygons for the smaller sinkholes. He stated that FFS follows Best Management Practices (BMPs), as they relate to the protection of water resources.

- Mr. Jamison stated that during the karst survey he was a part of seven or eight years ago, a contaminated karst window was discovered in the southwest corner of the forest. He stated that it seemed like plastic containers were leaking petroleum from the bottom of the hole, which connects to the Eight Mile Tract and Wakulla Springs. He stated that the response he got from DEP was that they could put out booms. Nothing was ever done about it, as far as he is aware. Mr. Korn stated that perhaps the FFS BMP Forester and FFS State Hydrologist should be contacted and asked to look into the situation.
- Mr. Korn and Mr. Colburn discussed pine plantations and associated transitioning activities.
- Mr. Korn went around the room for final comments from advisory group members.
- Mr. Scalco stated that FFS did a good job with the draft plan, as it is understandable and achievable.
- Ms. Wilbur agreed with the positive comments made by her boss, Mr. Scalco (Wakulla State Park Manager).
- Mr. Weaver stated that he had never been on a management plan advisory group before, and he appreciates the work it has taken to put the document together.
- Mr. Perrin declared that he would like to see more detail and wonders how the draft plan dovetails into the five-year operational plans. He stated that he didn't want FFS staff to spend all their time writing plans and not managing forests though. He stated that from what he has seen in terms of management on the state forest, FFS is doing a good job.
- Ms. Alix stated that what Mr. Perrin said makes sense.
- Mr. Walker stated he appreciated the opportunity to participate on the advisory group. He asked if anyone in Florida has looked into getting pit toilets that do not stink, like what is available in National Parks, for bathroom facilities.
- Mr. Scalco stated that DEP uses mulching toilets which are effective means of a sanitary facility. Discussion ensued regarding the maintenance of such facilities.
- Mr. Pelc spoke about adding language into the draft plan regarding opportunities beyond passive outreach and taking action to seek out cooperative partnerships in the area. Mr. Korn asked Mr. Pelc to create the language and send it in to Mr. Colburn so that FFS may consider incorporating such language into the plan.
- Mr. Pelc inquired about the level of emphasis within the silviculture section of the draft plan regarding longleaf pines on the forest. Mr. Korn stated the natural community section of the plan contained information on managing for longleaf pine.
- Mr. Pelc declared that the state forest is part of a region that is gaining increasing importance as a wildlife corridor, stretching from St. Marks to the Apalachicola National Forest. This state forest is ground zero for the Apalachicola natural area and there will most likely be a "spotlight" on the area in the future.
- Mr. Jamison stated that he is a fan of Wakulla State Forest and the managers are doing good things. He stated he would like to see further karst explorations pursued, especially in the northeast portion of the property. He stated that historically, the Spanish had a waterway route from St. Marks to the San Luis Mission, through McBride Slough and a formerly water-connected Aim sink swamp area. Mr. Jamison stated that DeSoto was on WaSF using this historic waterway, which makes the route along the slough potentially an important archaeological/historical area. He declared he would like the slough surveyed.

- Mr. Crowe (NWFWMD) stated that he created the map Mr. Jamison spoke of that "charted" DeSoto's historic waterway route.
- Mr. Colburn stated that he could request DHR to check into surveying the slough. Mr. Korn stated that any exploration work that has been done in the past that Mr. Jamison or anybody else may have information on is not in the draft plan because the information has not been passed to FFS. Mr. Korn invited Mr. Jamison to reflect on the information or whereabouts of information he is privy to and send it to Mr. Colburn so that it may be an appendix in the plan.
- Ms. Gray stated that she has not said much throughout the meetings because she is totally overwhelmed and in awe, while absorbing all of this information and process. She declared that she had no idea the level of complexity that goes into managing a state forest. She stated that FFS is doing a good job.
- Mr. Colburn thanked the advisory group members for the amount of work they have put into this process, as it is much work to both read through and develop management plans. He stated that the group's input is invaluable and he appreciates everyone's participation.
- Mr. Korn asked the group if everyone, as a consensus, was generally good with the plan.
- Everyone in the group gave Mr. Korn an actual "thumbs up." Mr. Korn stated that the FFS Director would be looking at this local level input next, and then the draft plan will go before the Acquisition and Restoration Council.

Meeting End Time: 2:51 p.m.

Exhibit X

State Forest Summary Budget

Wakulla State Forest Summary Budget

	WAKULLA STATE FOREST LANDS MGT. ONLY 13-14 EXPENDITURES -	Percentage of Total for FY 2013-14	WaSF Based Upon LMUAC Resource Management Funding Need
Resource Management	**$ 52,109**	**30.40%**	**$ 199,910.82**
Exotic Species Control	$ 1,420	2.50%	$ 16,440.03
Prescribed Burning	$ 38,141	5.80%	$ 38,140.88
Cultural Resources Management	$ 57	0.10%	$ 657.60
Timber Management	$ 5,735	10.10%	$ 66,417.74
Hydrological Management	$ 397	0.70%	$ 4,603.21
	$ -		$ -
OTHER RESOURCE MANAGEMENT	$ 6,359	11.20%	$ 73,651.36
Listed Species Management	$ -		$ -
Forest Pest and Disease	$ -		$ -
Plant Conservation Program	$ -		$ -
State Forest Research Projects	$ -		$ -
Boundary Surveys for State Forests	$ -		$ -
Other Activities Also Include:	$ -		$ -
Liaison Community Meetings / Boundary Line Maintenance / Forest Inventories and Various Other Activities / Wildfire Suppression on State Forests			
			$ -
Administration	**$ 4,429**	**7.80%**	**$ 51,292.91**
Central Office Headquarters	$ 4,429	7.80%	$ 51,292.91
District/Regions	$ -		$ -
Units/Projects	$ -		$ -
	$ -		$ -
Support	**$ 16,750**	**29.50%**	**$ 96,009.80**
Land Management Planning	$ 1,022	1.80%	$ 11,836.83
Land Management Reviews	$ 170	0.30%	$ 1,972.80
Training/Staff Development	$ 3,237	5.70%	$ 37,483.28
Vehicle Purchase	$ 227	0.40%	$ 2,630.41
Vehicle Operations and Maintenance	$ 8,460	14.90%	$ -
	$ -		$ -
OTHER SUPPORT	$ 3,634	6.40%	$ 42,086.49
State Forest Land Acquisition Support			$ -
Other Support Activities Also Include:	$ -		$ -
Computer Maintenance / Radio Maintenance / Technical Support / Management of Apiary and Cattle Leases / State Forest Easements and Other Various Activities	$ -		$ -
			$ -
Capital Improvements	**$ 11,072**	**19.50%**	**$ 128,232.27**
New Facility Construction	$ 2,612	4.60%	$ 30,249.66
Facility Maintenance	$ 8,460	14.90%	$ 97,982.61
			$ -
Visitor Services/Recreation	**$ 7,268**	**12.80%**	**$ 84,172.98**
Information/Education	$ 1,647	2.90%	$ 19,070.44
Operations	$ 5,621	9.90%	$ 65,102.54
			$ -
Law Enforcement	$ -	0.00%	$ -
Total	**$ 56,781**	**100.00%**	**657,601.39**

Exhibit Y

Arthropod Control Plans on WaSF Responses from Wakulla County, Florida and Leon County, Florida

From: Juarez, Padraic R
To: Reed, Jennifer
Subject: Wakulla MC Arthropod Control Plan
Date: Wednesday, January 27, 2016 1:59:13 PM
Attachments: Padraic Juarez MS REHS CPM.vcf

Hello Ms. Reed;

Thank you for your letter dated 1/25/16. As per your request we are writing to tell you that we will not be doing any operations on the property outlined in your letter. Please also note that Mr. Keith Lawhon is no longer with us and he has been replaced with Floyd Williams.

Should you have any questions or need additional information please contact me at the above email.

Padraic Juarez, MS REH...
DOH
CHD ADMINISTRATOR
WAKULLA COUNTY HEALTH D...
(850) 926-0400 x 203 Work
(850) 528-5902 Mobile

Padraic.Juarez@flhealth.gov

Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Section 388.4111, F.S.
Telephone: (850) 617-7995

Return to:
Mosquito Control Program
3125 Conner Blvd, Bldg 6,
Tallahassee, Florida 32399-1650

ADAM H. PUTNAM
COMMISSIONER

For use in documenting an Arthropod Control Pan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein. Fill this form out if control work is necessary or planned.

Name of Designated Land: Wakulla State Forest

Is Control Work Necessary: Yes

Location: Those sections of the Wakulla State Forest located within Leon County.

Land Management Agency: Florida Forest Service

Are Arthropod Surveillance Activities Necessary?
If yes, please explain:
Although it is not likely that mosquito control applications will be necessary, there are numerous residents adjacent to the sections of the Wakulla State Forest located within Leon County. In the event of arbovirus activity it may be necessary to conduct surveillance and treat both larvae and adult mosquitoes on Forest property. Additionally, as the private parcels adjacent to the Forest property are developed, mosquito larvae from surrounding Forest areas may need to be treated to prevent large numbers of mosquitoes from invading these residents.

Surveillance techniques proposed:
_X_ Landing Rate Counts _X_ Light Traps __ Sentinel Chickens
_X_ Citizen Complaints _X_ Larval Dips __ Other

If "Other", please explain:
1.
2.

Arthropod Species of importance:
Culex nigripalpus, Aedes infirmatus, Psorophora ferox and other floodwater mosquitoes.

Any adulticiding on Wakulla State Forest may be done only in the event of a public health emergency and/or bioterrorism as ordered by the Florida Public Health Service, the Florida Department of Agriculture, and/or the Florida Forest Service. Any control on the State Forest utilizing adulticides must comply with the US EPA and State of Florida Department of Agriculture approved pesticide label language restrictions and guidelines.

Proposed Larval Control:

Proposed Larval Monitoring Procedure: Larval dip counts.
Are post treatment counts being obtained: Yes.

Biological Control of Larvae:

Might predacious fish be stocked: No.
Other biological controls that might be used: None.

Material to be Used for Larviciding Applications: (Please Check All That Apply)
_X_Bti
_X_ Bs
_X_ Methoprene
__ Non-Petroleum Surface Film
__Other, please specify----

Please specify the following for each larvacide:
Chemical or common name; Ground Aerial; Rate of Application; and Method of Application
Bti, Bs, Methoprene – Applied aerially by helicopter and on the ground by hand broadcast and backpack sprayer at label rates.

Proposed Adult Mosquito Control: When requested by the Forest Supervisor, and only in high public use, residences and maintenance areas. For example, the Forest Supervisor may request that we adulticide in the area of his residence or a specific site in the Park in preparation for a special event.

Please specify the following for each adulticide:
Chemical or common name, Rate of application, Method of Application
Permethrin, Sumithrin – Applied by hand and/or truck mounted sprayer at label rates.

Proposed Modifications for Public Health Emergency Control:
Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure of Control Activities:
The Mosquito Control Director will notify the State Forest of any activity by contacting the State Lands Forester at:

Wakulla State Forest Office
3674 Bloxam Cut-Off Road
Crawfordville, Florida 32327

Records:
Are Records being kept in accordance with Chapter 388, F.S.: Yes.

Records Location: Leon County Mosquito Control, 2280 Miccosukee Road, Tallahassee, FL 32308

Length of time records are maintained: Records are maintained a minimum of 3 years.

Vegetation Modification:
Proposed trimming or alteration of vegetation to conduct surveillance or treatment: None.

Proposed Land Modifications:
Is any land modification, i.e., rotary ditching proposed: No.

Include proposed operational schedules for water fluctuations: N/A

List any periodic restrictions, as applicable, for example peak fish spawning times: N/A

Proposed modification of Aquatic Vegetation: None.

Land Management Comments:
Adult mosquito spraying will be initiated by Leon County and/or its agents, on Florida State Forests land only in the event of a public health emergency and/or bioterrorism as ordered by the Florida Public Health Service, the Florida Department of Agriculture, and/or the Florida Forest Service.

Arthropod Management Comments:

Signature of Lands Manager or Representative Date

2-11-16
Signature of Mosquito Control Director/Manager Date